GrowerFacts

Osteospermum 3d Double

(*Osteospermum ecklonis*)

Propagation

- Choose a well-drained medium with an EC of 0.75 to 0.80 mmhos and a pH of 5.8 to 6.2.
- Stick cuttings within 12 to 24 hours of arrival. Cuttings can be stored overnight, if necessary, at 45 to 50°F (7 to 10°C).
- Soil temperature should be maintained at 68 to 70° F (20 to 21°C) until roots are visible.
- A rooting hormone can be applied to promote early, uniform rooting.
- Mist cycling may need to be applied for up to 24 hours per day for 3 to 5 days, depending on local conditions. Frequency and run time should be reduced during the dark period, but unrooted cuttings must not be allowed to wilt.
- Reduce mist frequency after 3-5 days. Mist should be removed entirely on Osteospermum after 9-12 days.
- Begin fertilization with 75 to 100 ppm N when roots become visible. Increase to 150 ppm N as roots develop.
- Once roots are visible, the media should be kept moderately wet but never saturated. This will help prevent iron deficiency and the associated chlorotic foliage which can develop.
- 3D Osteospermum should not be pinched in propagation but flower buds can be removed if needed.
- A PGR in propagation is optional, but will help to keep nodes closely spaced.
- 3D Osteospermum rooted cuttings should be ready for transplanting 28 to 32 days after sticking.

Growing On to Finish

- Use media with good aeration, drainage and water-holding capacity.
- Like most Osteospermum, the 3D series prefers a medium that will dry regularly between waterings.
- A pH of 5.8 to 6.2 is optimum.

Temperature

- After transplanting, allow plants to become established for 7 to 14 days, depending on pot size, at a night temperature of 59 to 64°F (15 to 18°C). Once plants are well-established and rooted in, pinch and begin growing at recommended cool temperature.
- Nights: 44 to 55°F (7 to 13°C).
- Days: 59 to 76°F (15 to 24°C); avoid temperatures above 80°F (26°C).

Transplanting

Rooted cuttings should be transplanted at or slightly above the soil line of the final container. This will greatly reduce problems with various root and stem rots. In some situations a preventative fungicidal soil drench may be appropriate.

Light

3D Osteospermum will perform best under moderate to high light levels of 5,000 to 9,000 f.c. (50,000 to 90,000 Lux).

Watering

- The media should be allowed to dry regularly between waterings and never be saturated. However, plants should not be allowed to wilt at anytime.
- Leach regularly to avoid the buildup of highly soluble salt levels.

Fertilizer

Use a balanced fertilizer at a rate of 200 to 250 ppm N. When grown excessively hungry, plants will become woody and will not branch properly.

Pinching

3D Osteospermum should be pinched once, as soon as they are well rooted, to maximize branching and create a full plant covered in flowers.

Controlling Growth

- High light intensity and cool temperatures are needed for optimal habit.
- 3D Osteospermum are responsive to plant growth regulators. Begin PGR applications as new growth develops after pinching, side shoots should be developed to about 1” long. Early sprays of Cycocel (750-1,000 ppm) or Sumagic (5-10 ppm) are effective. We do not recommend PGR sprays after visible bud stage. At this point, applying a Cycocel drench (750 to 1,500 ppm), a Sumagic drench (0.5 to 1ppm), or a Bonzi drench (2-4ppm) is effective in reducing elongation. More frequent applications with lower concentrations will be required for smaller container sizes or if grown under warm conditions.
- We do NOT recommend the use of B-Nine on 3D Osteos, as this may have a negative effect on the expression of double flowers.

These recommendations for plant growth regulators

should be used only as general guidelines. Growers must trial all chemicals under their particular conditions.

Common Problems
Insects: Thrips, whitefly, aphids

Diseases: Botrytis (gray mold), Pythium, Rhizoctonia

Problem: Plant collapse

Causes: Plants grown in saturated media for extended periods of time (Pythium, Thielaviopsis); Stem canker (Botrytis); Rooted cuttings transplanted too deeply

Problem: Excessive vegetative growth and lack of flowers

Causes: Excessive ammonium-based fertilizer; Over-fertilization under low light conditions; Low light and overwatering, saturated media

Problem: Yellowing of young foliage

Causes: Saturated media

Problem: Foliage necrosis

Causes: Highly soluble salts in media; Excessive water stress

Problem: Poor branching and thin plants

Causes: Low fertilization during early stages of growth; low light conditions

Crop Schedule & Uses
(Crop Schedule In Weeks)

Unrooted cuttings
4-in. (10-cm) Pot 1 PP* - 13-16 weeks

6-in. (15-cm) Pots 1 PP* - 14-17 weeks

10 to 12-in. (25 to 30-cm) Pots 3 PP* - 15-18 weeks

Rooted cuttings
4-in. (10-cm) Pot 1 PP* - 10-13 weeks

6-in. (15-cm) Pots 1 PP* - 11-14 weeks

10 to 12-in. (25 to 30-cm) Pots 3 PP* - 12-15 weeks

*PP: Plants per pot or basket

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.

Ball

Ball Horticultural Company
622 Town Road, West Chicago, Illinois, USA, 60185-2698
630 879-BALL www.ballseed.com