

CORA™

catharanthus roseus

Minimum Germination Rate: 85%

Seed Product Form: Raw

FLOWERING

Time Frame when plants are receptive to flower initiation: Days 18 – 21; 4 – 6 leaves present.

Flowering Type: Day Neutral Plant – will flower regardless of daylength.

Specific Flowering Mechanism: Temperatures > 72°F (22°C) will hasten flower development.

PLUG CULTURE

Germination – *Optimum conditions for seedling development that begins the day the crop is sown until cotyledon expansion.*

Expect radicle emergence in 8 – 9 days.

Cover: Seeds may be covered with a medium layer of coarse vermiculite to maintain moisture levels.

Media:

- pH: 5.3 – 5.8
- EC: <1.0

Light: Dark conditions are required for germination. Once cotyledons have expanded, provide light at 100 – 500 foot candles (1000 – 5000 lux).

Temperature: 75° – 78°F (24° – 25°C) until day 14.

Moisture: Wet (4+), from day 1 – 6. On day 6, drop to moisture level moist (3), and water to (4) until day 9. Then alternate between moisture level medium (2), and moist (3).

Humidity: 100% from day 1 – 10 or until seed coats are shed.

Dehumidify: Day 11 to 40%. Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Maintain EC at <1.0. Fertigation water should not be greater than 0.5.

Plug Bulking/Flower Initiation – *Optimum conditions during the vegetative period, beginning at cotyledon expansion, needed for the root to reach the edge of the plug cell; AND to make the plant receptive to flower initiation.*

Media:

- pH: 5.3 – 5.8
- EC: 1.0 – 1.2

Light: Supplemental lighting at 350 – 500 foot candles at day 9 will enhance shoot and root growth.

Temperature: 72° – 74°F (22° – 23°C) from day 14 – 18. On day 19, begin 70° – 74°F (20° – 23°C).

Average Daily Temperature (ADT): 72°F (22°C)

Moisture: Alternate between moisture level wet (4) to medium (2) from days 9 – 16. Allow the soil to approach level medium (2), before re-saturating to (4). Thereafter alternate between moisture levels wet (4), and dry (1). Allow soil to approach level (1) before re-saturating between to (4).

Fertilizers: Under high light conditions, apply an ammonium-based feed (17-5-17) at 50 – 75 ppm Nitrogen. Under low light conditions, apply a calcium-based feed (14-4-14) at 50 – 75 ppm Nitrogen.

Growth Regulators: If needed, spray B-Nine (daminozide) at 1250 – 2500 ppm.

Fungicides: Preventative fungicide may be applied between day 7 and 10 for Thielaviopsis and Rhizoctonia.

GROWING ON

Transplant Ready: 6 – 7 weeks from a '288' plug tray.

Finish Bulking/Flower Initiation – *Optimum conditions during the vegetative period, beginning at transplant, needed for the root to reach the edge of the container; AND to make the plant receptive to flower initiation.*

Media:

- pH: 5.3 – 5.8
- EC: 1.2 – 1.5

Light: Provide 3500 – 4500 foot candles (12 – 15 total moles or 35,000 – 45,000 lux) to hasten flower induction. Supplemental lighting under low light conditions at 350 – 450 foot candles (35,000 – 45,000 lux) will enhance shoot and root growth.

Temperature: 70° – 74°F (21° – 23°C) day and night time temperature.

Average Daily Temperature (ADT): 72°F (22°C)

Moisture: Alternate between moisture levels wet (4), and dry (1). Allow soil to approach level (1) before re-saturating to (4).

Humidity: 40 – 70%

Dehumidify: Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Under high light conditions, apply an ammonium-based feed (17-5-17) at 100 – 150 ppm Nitrogen. Under low light conditions, apply a calcium-based feed (14-4-14) at 100 – 150 ppm Nitrogen.

Growth Regulators: It is best to control growth through moisture, feed and temperature management. If needed, apply sprays of B-Nine (daminozide) at 2500 – 5000 ppm, or A-Rest (ancymidol) at 3 – 5 ppm, or Bonzi (paclobutrazol) at 2 – 3 ppm.

Pre-Shipping Techniques to Enhance Post Harvest Quality

When to treat: 1 – 2 weeks prior to finish or shipping.

Growth Regulators: B-Nine (daminozide) at 2500 – 3000 ppm.

Fertilizer: Potassium nitrate drench at 150 ppm Nitrogen.

Common Diseases: Thielaviopsis, Rhizoctonia, Pythium. Monitor moisture and humidity levels and use preventative fungicide drenches.

Common Pests: Fungus Gnats, Shore Flies and Thrips. Use pesticides according to label directions.

SCHEDULING

Total crop time: 14 – 17 weeks

'288' Plug crop time: 6 – 7 weeks

Transplant to finish crop time: **Packs:** 8 – 10 weeks

4" crop: 9 – 11 weeks

6" crop: 9 – 12 weeks, depending on number of plugs transplanted into pot.

PRODUCT USE

Packs, pots, containers, mass plantings

GARDEN SPECIFICATIONS

Light: Full sun

USDA Hardiness Zone: 11

AHS Heat Zone: 12 – 1

Garden Height: 14 – 16 inches (35 – 40 cm)

Garden Width: 22 – 25 inches (55 – 62 cm)