



Camelot™

DIGITALIS PURPUREA

Minimum Germination Rate: 85%

Seed Product Form: Pelleted

FLOWERING

Time frame when plants are receptive to flower initiation: 8 – 12 leaves are present.

Flowering Type: Facultative long-day plant (secondary) – long days enhance flowering.

Specific Flowering Mechanism: High light enhances flowering.

PLUG CULTURE

Germination: Optimum conditions for seedling development that begins the day the crop is sown until cotyledon expansion. Expect radicle emergence in 3 – 4 days.

Cover: Do not cover seed.

Media: • pH: 5.8 – 6.2

• EC: 0.5 – 0.75

Light: Light is necessary for germination. If utilizing a chamber, providing a light source of 10 – 100 foot candles (100 – 1,000 lux) will improve germination and reduce stretch.

Temperature: 65° – 70°F (18° – 21°C) until cotyledon expansion.

Moisture: Medium (2) until radicle emergence. Then begin alternating between moisture levels moist (3) and medium (2). Allow media to approach level (2) before re-saturating to level (3). NOTE: Saturated media will discourage the roots from penetrating into the media.

Humidity: Days 1 – 6 maintain 90 – 95% or until radicle emergence and initial roots penetrate the media. On day 7, reduce to 40 – 70%.

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

Plug Bulking: Optimum conditions during the vegetative period, beginning at cotyledon expansion, needed for the root to reach the edge of the plug cell.

Media: • pH: 5.8 – 6.2

• EC: <0.75

Light: Provide a light shade.

Temperature: 60° – 65°F (16° – 18°C)

Moisture: Alternate between moisture levels moist (3) and medium (2). Allow media to approach level (2) before re-saturating to level (3).

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: Feed established seedlings at 75 – 150 ppm nitrogen every 2 – 3 waterings with a calcium based fertilizer (13-2-13 or 14-4-14).

Growth Regulators: PGRs applied in the plug stage will produce a more compact plant that is easier to ship. Camelot will respond to B-Nine (daminozide) at 2,500 – 3,500 ppm or Sumagic (uniconazole) at 3 ppm.

GROWING ON

Transplant Ready: 4 – 6 weeks from sow in a '288' 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.

In trials, plants grown in greenhouses with additional lights exhibited stretched habits and loose flower spikes. Crops grown cool in protected cold frames will produce compact plants with good lateral development of secondary spikes.

Media: • pH: 5.8 – 6.2

• EC: 0.75 – 1.5

Light: Time to flower and the number of flowers produced increase proportionally with light levels. Though classified as a shade plant, Digitalis can handle high light conditions with adequate moisture and cool temperatures.

Temperature: 45° – 55°F (8° – 12°C) nights are optimal though crop will tolerate a range of 40° – 65°F (4° – 16°C). Under short days, cool temperatures can benefit flowering response. Camelot does not need a chilling period to set flower, however cooler temperatures will produce a higher quality plant with an increased number of flower stems.

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow media to approach level (2) before re-saturating to level (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: Constant liquid feed at 100 – 150 ppm nitrogen with an ammonium-based fertilizer (15-5-15 or 15-0-15). Increase feed with increasing light intensity and temperature. Digitalis can benefit from additional iron and calcium. Avoid ammonium levels >20%.

Growth Regulators: Digitalis responds to B-Nine (daminozide), A-Rest (ancymidol), Bonzi (paclobutrazol), or Sumagic (uniconazole). Apply before flower spike begins to elongate.

Common Diseases: Botrytis

Common Pests: Aphids

PRODUCT USE	GARDEN SPECIFICATIONS
Large pots, containers, shade and sun plantings, mass plantings, home and commercial cut flower.	Light: Partial shade to full sun USDA Hardiness Zone: 5 AHS Heat Zone: 12 – 1

	Garden Height	Garden Width
Camelot	3.5 – 4' (1 – 1.5 m)	24 – 30" (60 – 75 cm)

DIGITALIS SCHEDULING IN WEEKS

	Camelot
Total crop time	20 – 24
'288' plug crop time	4 – 6
Transplant to finish crop time	Gallon crop: 16 – 20

Note: These suggestions are only guidelines and may have to be altered to meet individual grower's needs. Check all chemical labels to verify registration for use in your region.