

Digitalis Camelot™

Culture Guide



Botanical name: *Digitalis purpurea*
Product form: Seed
Containers: Gallons
Habit: Upright
Vernalization: Not required (First Year Flowering)

Garden Specifications

Garden Height: 36–48" (91–121 cm) tall
Garden Width: 24–30" (60–76 cm) wide
Exposure: Full sun
USDA zone: 4–9
AHS zone: 12–1
Product use: Containers, Landscapes

Germination

Stages 1 & 2

Germination time: 3–4 days
Media temp: 65–70 °F (18–21 °C)
Chamber: Optional
Light: Required for germination
Seed cover: No

Moisture level: 4 - WET: Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

Rec. tray size: 288–cell tray
Seeds per cell: 2–3

Young Plant Production

Stage 3 & 4

Temperature

Day: 64–66 °F (18–19 °C)
Night: 60–62 °F (16–17 °C)
Average daily temperature: 62 °F (17 °C)

Lighting

Day extension lighting: Not necessary
Light intensity: 200–250 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ for the first two weeks after sowing or until true leaf development occurs. Light levels can be increased up to 600 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ as rooting increases and the seedling matures.
Day length response: Obligate long day
Daily light integral: 10–12 $\text{mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$

Media pH: 5.8–6.2

Media EC: SME 0.5 to 0.75 mS/cm



Fertilizer: 75–125 ppm N

Moisture level: Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 3.

2 - MEDIUM: Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.

3 - MOIST: Soil is brown in color, strongly squeezing the soil will extract a few drops of water, and trays are light with no visible bend.

Pinching: No

Plant growth regulators (PGRs): If necessary, plants will respond to sprays of B-Nine® WSG (daminozide) at 2,500–3,500 ppm, or a Sumagic® spray at 3 ppm.

Plug grow time: 6–7 weeks in a 128–cell tray

Comments: No vernalization required. Although, Camelot™ Digitalis can be transplanted in late summer–early fall for faster flowering in the following year.

Bulking and Vernalization

Vernalization: Not Required (First Year Flowering)

Finishing

Temperature

Day: 68–70 °F (20–21 °C)
Night: 64–66 °F (18–19 °C)
Average daily temperature: 66 °F (19 °C)

Lighting

Day extension lighting: Not necessary
Light intensity: 1,200–1,600 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$
Day length response: Obligate long day
Daily light integral: 14–16 $\text{mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$

Transplanting: Transplant directly into the finished container. Place the rooting media slightly above the level of media in the container. Make sure that the root ball is covered and that the plug is situated in the center of the pot. Do not cover the crown of the plant as this is the active growing point.

Media pH: 5.8–6.2

Media EC: SME EC: 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm

Fertilizer: 75–125 ppm N

Pinching: No. Pinching is not recommended or needed.

Plant growth regulators (PGRs): Bonzi® (paclobutrazol) sprays at 10–15 ppm, or Sumagic® sprays at 5 ppm can be used. Apply PGRs before flower spike begin to elongate. Drench with Bonzi® at 2–4 ppm to hold plants for sale.

Tech tip: Plants grown in the greenhouse 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.



Try Chrysal Alesco®, a postharvest foliar spray, to protect ethylene sensitive crops during shipping and retail.

Moisture level: Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 4.

2 - MEDIUM: Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.

4 - WET: Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

Common pests: Aphids, Leafminers

Common diseases: Botrytis

Scheduling

Size	Crop Time	Plants Per Pot
1.25 to 2.5 quart (5.5 to 6.5 inch, trade gallon)	9–10 weeks	1 ppp
3.0 quart to 2.0 gallon (7.5 to 10 inch)	9–10 weeks	2–3 ppp

Estimated finish crop time is from transplant of a 128-cell tray and finished at an average daily temperature (ADT) of 66 °F (19 °C).

Example crop schedule for a 1.5 gallon

Weeks From Transplant	Description
1 week	Transplant two to three plugs into the center of the container
4 weeks	Feed continually, and increase feed with increasing light intensity. Digitalis also benefit from additional iron and calcium during production. Avoid ammonium levels above 20% to reduce the need for extra PGR applications.
6 weeks	Apply a PGR application to tone the plant and control height
10 weeks	Finish



Camelot™ Rose and Camelot™ Cream