

Poinsettia

OVERVIEW

Enduring

Euphorbia pulcherrima



This series boasts excellent color and form retention. Adaptable to low light conditions making it perfect for northern growers. Little to no need for PGRs.



Enduring Red



Enduring White

STATUS	CULTIVAR	CULTIVAR CODE	RESPONSE TIME (WEEKS)	VIGOR	FLOWER COLOR
	Enduring Red	11010	8	●●○○○	Red
	Enduring White	11013	8	●●○○○	White

●○○○○ Compact ●●○○○ Medium-Compact ●●●○○ Medium ●●●●○ Medium-Vigorous ●●●●● Vigorous

STICKING

Rooting Hormone	Optional: 1200-1500ppm IBA basal dip 100ppm K-IBA drench Not needed for callused cuttings.
Spacing	Stick and space so leaves of cuttings barely touch. Be sure apical meristem is not covered. Space will need adjusting based on cultivar leaf size.
Misting Instructions	Keep humidity and mist high to maintain moisture film on leaf surface. Reduce mist as roots begin to grow. Apply Capsil at a rate of 1-2oz./100gal. Of water to the cuttings immediately after sticking to help with recovery from wilting and improve root uniformity.

FERTILITY

Fertilizer Rate	150ppm N with low ammonium and phosphorus before 7-10 days applied weekly to charge once callus forms.
EC Range	1.0-2.0 mS via SME
pH Range	5.5-6.2

TEMPERATURE

Average Soil Temperature	73-75°F (22-24°C)
Average Air Temperature	72-82°F (22-28°C)

IRRIGATION

Irrigation Frequency (after day 14)	Level 3: Keep media moderately moist with mild dry cycles. Young plants should never be allowed to wilt.
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LIGHT

Vegetative Photoperiodic Requirements	Long Day: Must have 13+ hrs of light per day.
Benefits From Shade	Ideal light levels at 1200-1500 fc (12000-16000 lux) at the start of propagation with shading. Increase to 2000 fc (21600 lux) by week 4.

PINCHING

No pinching is required in propagation, unless holding liners for more than 4 weeks. Then a pinch is required.

POTENTIAL DISEASES

Botrytis | Erwinia | Pythium | Rhizoctonia

POTENTIAL PESTS

Fungus Gnats | Shore Flies | Whitefly

GROWTH REGULATION

- Chlormequat (11.8%) at 750-1500ppm as needed
- Daminozide (85%) at 750-2500ppm as needed
- One PGR application is sufficient for medium vigor varieties, but larger varieties may require 2-3 applications.

TIPS

- Stick immediately or place cuttings in cooler upon arrival at 50-55°F (10-13°C) for a minimum of 4 hours and remove cuttings in batches that can be stuck within 1 hour.
- Fungicide treatments within 24 hours of stock will aid in avoiding botrytis and erwinia infections.
- If cuttings are stressed during sunny days it is better to increase shading rather than mist.



CONTAINER SIZE	PLANTS PER POT	TRANSPLANT WEEK (SOUTH-NORTH)
4”-4.5” (10-11cm)	1	Direct Stick 36-39
6” (15cm)	1	32-36
8” (17cm)	2-3	29-32
10” (19cm)	3-4	27-29
FERTILITY		
Fertilizer Rate	Constant feed at 100-200ppm N using a balanced forumula with minor nutrients such as 15-5-15 Cal/Mg + S.T.E.M. or 20-10-20 early. Reduce to 75-125 ppm N when plants begin to color. Weekly calcium foliar sprays encourage strong growth, prevent leaf edge burn, and prevent bract edge burn.	
Short Day EC Range	1.0-2.0 mS via SME	
pH Range	5.8-6.2	
TEMPERATURE		
Day Temperature	68-78°F (20-26°C)	
Night Temperature	65-70°F (18-21°C). Night temperatures above 70°F (21°C) will result in heat delay	
IRRIGATION		
Irrigation Frequency	Level 3: Keep media moderately moist with mild dry cycles.	
LIGHT		
Flowering Photoperiodic Requirements	Short Day: Less than 12 hours of light per day.	
Photoperiodic Instructions	Optional on cloudy/overcast days	
Supplemental Benefits From Shade?	No, strong growth will be promoted with light levels of 4,500 fc (48,000 lux)	
PINCHING		
- Pinch when roots reach the edge of pot. Usually 10-14 days after transplant or 4-5 weeks after direct sticking. - Pinch to leave the number of nodes to match finish pot size: 4-5 nodes for 4” (10 cm), 5-6 nodes for 6” (15cm), or 7-8 nodes for 8” (19 cm). - Leaf removal at pinch is beneficial and can maximize light penetration - First week after pinch, apply light shade and maintain high humidity for plant to recover. - Ethephon (3.9%) can be applied before and/or after pinching to control stem elongation and leaf expansion if plants cannot be pre-spaced within 2 weeks following pinch.		
POTENTIAL DISEASES		
Alternaria Botrytis Pythium Rhizoctonia Phytophthora Powdery mildew Thielaviopsis Fusarium Erwinia		
POTENTIAL PESTS		
Whitefly Fungus gnats Thrips Spider mites Mealy Bugs		
GROWTH REGULATION		
- Can be applied following transplant if no growth regulators were applied in propagation. 500-1000ppm Cycocel (11.8% chlormequat) may be used based on program needs. Follow label instructions - Utilize POSITIVE DIF to INCREASE stem elongation and NEGATIVE DIF to SLOW stem elongation. - Fascination/Fresco (GA4A7, 6-BA) can be applied during the vegetative growth stage to achieve final height requirements. Spray applications can cause bract re-greening if applied during early initiation. Follow label instructions.		
TIPS		
- Maintain a warm finish environment for best bract expansion and size - Responds to DIF treatmntnes for height control		



SERIES SPECIFIC TIPS

- Uniform series in timing and habit. Clean, bright colors.
- Maintain a warm finish environment for best bract expansion size.
- Natural compact habit reduces the need for PGR.
- Responds to DIF treatments for height control.
- Heat tolerant, making it a good southern grower choice.

CARE AND HANDLING

- Recommended temperature during transport from greenhouse to the store: 50-57°F (10-14°C)
- Use sleeves for transport. The sleeves should extend 4-8cm (2-3") above bract tips for best protection.
- Ideally poinsettia should not be sleeved for more than 24 hours.
- Poinsettia should not be displayed in their sleeves.

CONSUMER CARE

- Keep soil evenly moist, but not saturated.
- Keep plants near a bright, sunny window. South, east, and west facing windows are best.
- Do not allow plants to touch the window as cold temperatures will damage plant.
- Maintain a temperature of 65-70°F (18-21°C)
- Keep plants away from drafty windows and doors that lead outside.
- Keep plants away from heating vents to avoid stress and drying out more quickly.

HISTORY

- Parental lineages native to Mexico
- Mitchells Nursery and Greenhouse 2016 trials: Enduring Pink 5th place in pink category
- Poinsettias are a contemporary symbol of Christmas in many parts of the world. It was cultivated by Aztecs for red dye, medical preparations and latex. Because of its brilliant red color, the flower is a symbol of purity. Poinsettias were introduced in the US in 1825 by Joel Robert Poinsett (US Ambassador to Mexico).
- Poinsettia is a member of the botanical family Euphorbiae. All species of this genus are characterized by a single female flower without petals or sepals surrounded by individual male flowers enclosed in a cup shaped structure called cyathium (the cyathia make up the yellow middle of the "flower"). The showy red (colored) portion most referred to as the flower, consists of modified leaves called bracts.
- Today's breeding and production efforts focus on market traits like consumer appeal, recognition, and long shelf life. Large, showy bracts, clean colors, good branching, unique colors, and diverse forms are all highly valued traits.