

Poinsettia

OVERVIEW

Freedom

Euphorbia pulcherrima



DÜMMEN
ORANGE®

Freedom is a traditional grower favorite. It is highly responsive and predictable.



Freedom Early Red



Freedom Red 2015



Freedom White

STATUS	CULTIVAR	CULTIVAR CODE	RESPONSE TIME (WEEKS)	VIGOR	FLOWER COLOR
	Freedom Early Red	11191	7	●●●○○	Red
	Freedom Red 2015	11020	7.5	●●●○○	Red
	Freedom White	11022	7.5	●●●○○	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 low phosphorus at 7-10 days and apply weekly. At transplant, fertilize with 200-250 ppm N with balanced feed to charge the media and rise foliage with clear water.
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

- 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 in 1 hour
- Fungicide treatments within 24 hours of stock will aid in avoiding botrytis and erwinia infections.
- Avoid direct air movement across leaf surfaces during first week of sticking.

Poinsettia

Finishing

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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?	Optional to initiate early flowering. Provide a minimum of 12 hours shade with less than 0.5 fc (5 lux) of light penetration.	
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		
Botrytis Pythium Rhizoctonia Phytophthora Powdery mildew		
POTENTIAL PESTS		
Whitefly Fungus gnats Thrips Spider mites		
GROWTH REGULATION		
- Tank mix of 1000ppm Chlormequat + 1200 ppm Daminozide can be applied before the start of short days to prevent lateral stretch - Low Paclo drenches 0.1-.25ppm prior to flower initiation can slow growth - GA4,7 + BA can be applied during vegetative stage to acheice final plant heigh specs		
TIPS		
- Plant rings or supports recommended to help strengthen lateral branches - The Florel® “sandwich” technique will enhance uniformity of branch position. Apply 250-500 ppm 5 days before and 5 days after pinch.		



SERIES SPECIFIC TIPS

- Heat tolerate, easy to size in any container
- Does not heat delay which makes this a predictable choice for southern growers
- Uniform series makes this an easy series to utilize in multicolor combinations
- Medium to high vigor allows for a wide range of container sizes possible
- Responds well to negative DIF treatment to control stretch
- Plant rings or supports recommended to help strengthen lateral branches.
- The Florel 'sandwich' technique will enhance uniformity of branch position. Apply 250-500ppm 5 days before and 5 days after pinch.

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 2017: Red 2nd place red 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.