



*Buying from the Source
Since 1972
Grower Select*

Applying Plant Growth Regulators

Plant growth regulation:

The length of the plants depends on the temperatures, relative humidity, light, soil moisture and variety. There is no standard recommendation as PGR applications can fluctuate considerably by climate and growing area. However Supreme Callas™ offer the following PGR rates below as a rough guideline for 6”-8” pots.

Bonzi (paclobutrazol) has proven to be the most effective plant growth regulator on the market for potted callas. Supreme Callas™ recommends using this product should it be necessary for your crop.

When 3-4 shoots are visible and they are 1”-2.5” tall is the best time to apply Bonzi.

When you drench Bonzi, we recommend drenching 1-2 days after watering. A slightly moist soil is necessary for the Bonzi solution to travel to the roots and will enhance the plants uptake of the PGR application.

Make a solution of 2 fl oz Bonzi to 1 gallon of water which equals 60 ppm aclobutrazol.

Drench: Depending on the variety a drench of 1—3 fl. oz. is recommended (60ppm)

When to drench? When 3-4 shoots are visible, with a shoot length of 1”-2.5”

Stage to apply PGR



Variety	Drench / # of Drenches*	# of Drenches*	Plantstage at (first) drench 6"-8" pot
Forever®	2 ounces	1	all sprouts above the soil (1"-2.5")
Memories®	3 ounces	1	all sprouts above the soil (1"-2.5")
Orange County®	1 ounce	1	all sprouts above the soil (1"-2.5")
Picasso®	2 ounces	1	all sprouts above the soil (1"-2.5")
Red Alert®	2 ounces	1	all sprouts above the soil (1"-2.5")
Snow Storm®	1 ounce	1	all sprouts above the soil (1"-2.5")
Sumatra®	3 ounces	1	all sprouts above the soil (1"-2.5")
Summer Sun®	1 ounce	1	all sprouts above the soil (1"-2.5")

*Number of drenches depends on the local growing conditions; light, temperatures and relative humidity. An extra drench (less solution) might be needed depending on the plant growth.



*Buying from the Source
Since 1972
Grower Select*

CALLA DRENCHES

Soil Drenches

Supreme Callas™ recommends the drenching schedule shown below. **IT IS IMPORTANT TO DRENCH ONLY WHEN WATERING IS NEEDED SO THAT PLANTS DO NOT BECOME OVER-SATURATED.**

1st Drench (2-3 days after planting) – Mix a “cocktail” of the products below and apply at a rate of 8 fluid oz/6” pot.

Timing	Against	Fungicide drench	Amount
2-3 days after planting	Pythium (water mold)	Subdue Maxx (mefenoxam 25%)	0,5 oz/100 gallons
	Pythium (water mold)	Aliette (fosethyl-aluminium 80%)	13 oz/100 gallons
	Against Erwinia (soft rot bacteria)	Phyton-27 (coppersulphate pentahydrate)	20 oz/100 gallons
	Rhizoctonia (yellowing and collapsing of the leaves)	Heritage (azoxystrobine 50%)	at 1 oz/100 gallons

An alternative treatment for pythium is Trichoderma that can be mixed through the media: RootShield at 1 lb/yd3 or drenched in week 4 and 7 at a rate of 8 oz/100 gallons.

2nd Drench (3 weeks after planting) – Mix a “cocktail” of the products below and apply at a rate of 8 fluid oz/6” pot.

Timing	Against	Fungicide drench	Amount
3 weeks after planting	Pythium (water mold)	Subdue Maxx (mefenoxam 25%)	0,5 oz/100 gallons
	Pythium (water mold)	Aliette (fosethyl-aluminium 80%)	13 oz/100 gallons
	Against Erwinia (soft rot bacteria)	Phyton-27 (coppersulphate pentahydrate)	20 oz/100 gallons

3rd Drench (6 weeks after planting) – Mix a “cocktail” of the products below and apply at a rate of 8 fluid oz /6” pot.

Timing	Against	Fungicide drench	Amount
6 weeks after planting	Pythium (water mold)	Subdue Maxx (mefenoxam 25%)	0,5 oz/100 gallons
	Pythium (water mold)	Aliette (fosethyl-aluminium 80%)	13 oz/100 gallons
	Against Erwinia (soft rot bacteria)	Phyton-27 (coppersulphate pentahydrate)	20 oz/100 gallons

Antibiotics (like Agrimycin) can be stronger against Erwinia, but to avoid excess of use of antibiotics, only apply when absolutely needed at 12 oz/100 gallons.



GROWERS MANUAL

*Buying from the Source
Since 1972
Grower Select*



Delivery of Tubers:

Supreme Callas™ tubers will be delivered fully treated and ready to plant. If you are unable to plant immediately they can be stored for 2-3 weeks under the proper conditions. Optimal short term storage is a dry area where the temperature is around 60 degrees Fhr with good air circulation to prevent mold. Calla tubers are cold sensitive and should not be allowed to freeze.

Growing Media:

The media should be sterile, well-draining with a pH of 6.5. Sande Supreme Callas™ recommends using a media with 60-80% coco peat for best results. A common mix used in calla pot production consists of 60% coco peat, 20% fine Finn peat and 20% coarse Finn peat. Avoid high ratios of fine particles in the media as this can result in your pots retaining too much water.

Planting:

Plant 1 16/18 cm tuber per 6" pot. Calla tubers must be planted with the eyes/sprouts facing up and covered with 1.5" – 2" of evenly moist potting mix. The roots begin to grow on the top of the tuber and then move down so proper soil coverage is important for good root development.

Watering: Constant water monitoring is crucial for growing Supreme Callas™ as a successful pot crop.

After planting, water 1-2 times to initialize plant growth. A fungicide should be applied at planting after the first watering to prevent mold. Moderate watering is then required until the leaves unfold. The pots should not be constantly wet, but rather slightly dry.

Watering is best done in the morning when you have the coolest temperatures of the day. This can be done with overhead watering as long as your system is in good condition. Any dry spots will create problems for the plants. Good quality water raised to an EC (electrical conductivity) of about 1.5 managed through a fertilizer program stimulates growth and good health. Be sure to keep the EC in your pots no higher than 2.0. Also avoid high levels of sodium, sulphate, bicarbonate and chloride as this will have a negative effect on the calla plants.

Fertilization:

Approximately 20 oz NPK (12-10-28) per cu yd is usually mixed through the potting soil as a basic fertilizer program. It is important to have sufficient levels of iron and magnesium. We also recommend applying fertilizer on a regular schedule throughout production. Keep in mind that a proper balance between nitrogen and potassium is the most important aspect to avoid excessive plant and foliage growth.

Light: Callas need light, proper light is key to flower development. Along with temperatures and careful water monitoring, light and relative humidity levels are critical for optimal growing conditions for a successful crop. Screening is recommended when illumination of 375 watts/sq yd or 5,000 foot candles or 55,000 lux is reached to help create a stable growing environment.



Buying from the Source
Since 1972
Growers Select

Recommendations for May 2016 blooming

CROP PLANNER:			
COUNTRY	USA	STATE	NJ
PROGRAM	Mother's Day 2016		
DATE OF EVENT	May 8, 2016	Sunday	
FINISH DATE	May 2, 2016	Monday	
FINISH WEEK	19		

Phase:

Recommended Day temperature
Recommended Night temperature
Target Rh

Rooting	Growing a plant	Flowering	Est. Crop time
63°F.	70°F.	75°F.	
63°F.	60°F.	60°F.	
75%	70%	70%	

Variety

Color

Forever®	pink
Sumatra®	pink
Memories®	black
Orange County®	orange
Picasso®	bi-color
Red Alert®	red
Snow Storm®	white
Summer Sun®	yellow

Alternative varieties:

Odessa®	black
Sunclub®	yellow
Zazu®	pink

Planting Week	Planting date	Estim. date first leaves unfold			Estim. date 90% of foliage unfolded			Estim. 1 st flowers		Target date 3 flowers colouring		Estim. # of Growing Weeks	Estim. # of Growing Days
		Weeks	7/Mar	3	28/Mar	3	Weeks	18/Apr	2	2/May	2		
8	15/Feb	3	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	11	77
8	15/Feb	3	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	11	77
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70
9	22/Feb	2	7/Mar	3	28/Mar	3	18/Apr	2	2/May	2	2/May	10	70

15/Feb



Stage to apply PGR
all sprouts are visible at 1.5"-2"
(2 to 3 weeks after planting)

Note:

- Final schedule might differ depending on the local growing climate (temperatures, light, Rh)
- The schedule is based on experiences in Sande testing greenhouse (Dutch circumstances) and experiences at US based customers
- The information provided is without engagement. Sande nor Calla Supply can be held responsible at any time for use of the information above.