

Quality Calla®



Dümmen Orange premium calla program features world class genetics for every program. Callas offer an elegant recognized flower form and add delight to any garden center.



Quality Calla® – Flowering Pot Culture



Shipment Arrival: Quality Calla® tubers will be delivered by Dümmen Orange to your facility. On arrival, place tubers in open trays to dry off any wounds which may have occurred during shipping. Hold for 2 days at 60-65°F (15-17°C) with 70-75% relative humidity. Air circulation is important and can be achieved using horizontal or floor fans. If necessary tubers may be held longer in these conditions.

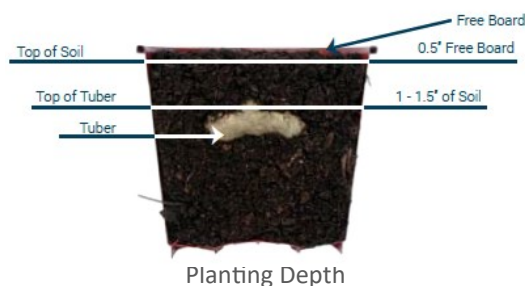
Media: Well-draining soil with a PH of 5.5-6.5 is essential. Peat based media with large or coarse particles is preferred. During the growth of Callas the soil should be consistently moist. Avoid saturated conditions.

Pots: Callas require pots in which water drains easily. Deep pots with “feet” on the bottom of the pot will help with required drainage and provide needed air circulation.

Planting: Plant the tubers in moist soil with the sprout side facing up. Cover tops of tubers with 1-1.5” (2.5-4 cm) of soil. Lightly water the pots so the soil is fully moistened, but not saturated.



Planting the tuber



Planting Depth

Fertilizer : Callas are moderate feeders. Liquid soluble formulations of 20-10-20, 17-5-17 or 15-5-15 including minors (Fe+ Ca+ Mg + micros) are acceptable. Rate of 100 ppm nitrogen is suggested. The first 2-3 weeks, an EC of 1.0 or lower is recommended. After the third week of growth, an EC of 2.0–2.5 is acceptable. EC above 3.0 is not recommended.

Germination—Stage 1: Calla tubers require a germination period. A constant temperature of 68-72° F (20-22°C) is recommended in the first week or two, until sprouts appear. Callas root from the top of the tuber. Don't be surprised to see some roots at the soil surface. Consider using a germination chamber to save energy and space. Light is not necessary during germination.

Light: Once germinated, callas perform best in bright natural light. Select a bright location ideally where cool temperatures can be maintained.

Air Circulation: Make certain there is good air circulation in the greenhouse, best created by horizontal fans (HAF). This promotes evaporation on the plants, decreasing chances for foliar disease.

Fungicide Drenches: Three preventative full spectrum fungicidal drenches are recommended.

- 1st drench at 2 to 7 days after planting,
- 2nd drench at leaf unfurl
- 3rd drench again at bloom push, when flower buds first appear.

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Bonzi Drenches:	<p>Multiple Bonzi drenches are required to control plant size. The rate of Bonzi and number of applications to be applied is dependent on variety, environmental conditions, and market preferences. In general 2 to 3 applications of Bonzi are suggested for most varieties and locations. When applying Bonzi, soil should be moist. After applying the Bonzi solution, the soil should not be saturated. This is the most critical stage of growing Callas. The plants are not capable of much transpiration because the leaves have not yet unfurled.</p> <ol style="list-style-type: none">1st Bonzi Drench occurs when sprouts are about 1/4 -1/2" (1-2 cm) tall. If all plants have equal sprouting apply the Bonzi drench to every pot. Otherwise select pots with sprouts and apply the first Bonzi drench only to those plants. Check every 3-4 days for plants with sprouts and drench them. Most varieties will show sprouting in 1-2 weeks and receive their first Bonzi drench. Some varieties do grow slower.2nd drench occurs about 1 week later,If necessary, a 3rd Bonzi application occurs about a week after the 2nd.
Water Management:	<p>Water in the morning when plants are actively taking up water into the leaf canopy. Don't water late in the day, as the plants may remain wet into the night leading to potential disease. As leaves unfurl, supply more water to the plants. Maintaining consistent moisture lessens stress on the plants. If the soil dries out, roots will crack, flowers will abort. Caution; some automated irrigation systems do not adequately give consistent moisture to the soil and portions may remain dry. Callas suffer when this occurs.</p>
Foliage Development - Stage 2:	<p>After the first Bonzi drench, the daytime temperature can be reduced to 65° F (17° C) & 55-60°F (13-16° C) nights. The introduction of a morning cold pulse/negative DIF further enhances plant compactness. The soil moisture level can now be reduced, but never allowed to dry completely. The drenches alone should provide enough moisture for a while.</p>
Spacing:	<p>After the final Bonzi drench and leaves are unfurling, plants must be spaced approximately one pot space apart from the other. More space is needed with larger plants. This allows for more light and air circulation around the plant, thus reducing stretch, creating a stronger and healthier plant.</p>
Bloom Push - Stage 3:	<p>Keep daytime temperatures between 60-65°F (15-17°C) & 50-55°F (10-13°C) nights from the point of full leaf expansion until shipping. Cooler temps promote richer flower color and sturdy compact plants. Employ the use of a morning cold pulse/negative DIF for enhanced results</p>
Flowering GA3 Application:	<p>When flower buds begin to emerge from the center of the leaf canopy, a spray application of GA3 is suggested at 10 ppm. This insures a full flush of flowers.</p>
Shelf Life GA3 Application:	<p>2-3 days before shipping, a light spray of 25 ppm GA3 may be applied. This will keep the finished calla pots upright and colorful for a longer period at the point of purchase.</p>
Shipping:	<p>Ideal time of shipping is when plants have 2-3 open flowers and a couple more visible buds. Make sure the soil is moist before shipping. Climate controlled shipping between 50-60°F (10-15°C) is recommended.</p>
Retail Placement:	<p>Placement at the retail level can have a significant effect on the longevity of finished callas. Bright natural light with a cool temperature is ideal. Avoid warm areas with artificial lights which promote stretching. Plants arriving in poor condition, or have stretched and withered at the retail level will only discourage future sales.</p>

