

crop culture report:

Calibrachoa Callie Series

This calibrachoa series works well for baskets and containers and has 19 different varieties to choose from. Callie varieties are generally ready for transplant after 4-5 weeks in propagation.

By Harvey Lang

The Callie calibrachoa series from Fischer USA offers 19 varieties for baskets and containers. Colors range from blue to red to white to yellow. Several new varieties have been added, including Light Blue, Painted Coral, Purple '07 and Purple Sunrise. More new varieties are planned for 2008, including some with unique and bicolor patterns.

Callies in the landscape are good plants for containers and baskets. They have a long-term summer flower display and a range of colors and can work in combination plantings with other seed or vegetative material. Also, Callies can be used for ground beds; however, irrigation and soil pH should be closely controlled.

Propagation

Unrooted cuttings should be stuck as soon as possible after arrival. If they cannot be stuck immediately, it is best to store the cuttings at 40-50° F with a relative humidity of more than 70 percent.

Bottom temperatures the first three weeks should be between 70 and 73° F. After roots are well developed, temperatures can be lowered to hold and tone the cuttings. Rooting hormones generally are not needed if adequate bottom heating is used. If growers decide to use rooting hormones, a 0.1 percent (1,000 ppm) IBA concentration is a good starting point. Excess application of rooting hormones can cause burning and damage to cuttings.

Mist schedules vary depending on light and temperature conditions; however, calibrachoa are moderately slow rooters and generally need to stay on mist longer than many other spring annuals, such as petunia, bacopa, verbena, etc. Cuttings should be hydrated and in a non-wilted stage within 24 hours after sticking. Avoid oversaturated media and high-mist volumes, as this can cause leaf yellowing and Botrytis infections.

A preventative fungicide spray a few days after sticking will help prevent Botrytis infections. Common fungicides include Decree (fenhexamid), Chipco 26019 (iprodione), Daconil (chlorothalonil), Spectro (thiophanate-methyl and chlorothalonil) and Heritage (azoxystrobin). A follow-up spray can be given about 5-7 days after the first application depending upon disease pressure.

Light And Fertilization

Maintain light levels between 1,000 and 1,200 foot-candles the first two weeks after sticking or until root development occurs. Light levels can be increased up to 3,000 foot-candles as rooting increases and the cutting matures.

Begin fertilization at 100-ppm nitrogen when roots become visible. Rates can be increased up to 200 ppm after roots become well developed. Use primarily Cal-Mag (calcium nitrate and magnesium nitrate) fertilizers in propagation to prevent unwanted stretch.

Calibrachoa cuttings can show signs of tip yellowing and iron deficiency under alkaline water, high pH media and/or overly wet conditions. Drench plants with either Sprint 330 or 138 (iron sulfate or iron chelate) at a rate of 2 oz. per 100 gals. to correct tip yellowing.

Callies are generally ready for transplant after 4-5 weeks in propagation. Plants can be pinched during

propagation (about 3½-4 weeks from sticking). Pinching in the liner stage results in a bushier, more compact plant after transplant.

Finishing

Callies can be grown in pot sizes ranging from 3½ to 10 inches as well as in baskets. Plants should be grown with moderate to warm temperatures (65-70° F days and 60-65° F nights) after transplant to establish plants. The plants can be cooled down later after they root out to help control growth. Make sure plants have a good root system before cooling, or you'll run into fungal root rot.

Calibrachoa are long-day plants that generally need at least 12 hours of day length to bring them into flower. Don't expect to sell many calibrachoa before April 1 (although many of the Callies are early flowering and will bloom before April 1 under natural days). Night-interruption or day-length-extension lighting can be used to hasten flowering.

Pinch plants either in propagation or shortly after transplant to encourage branching. Plants generally do best with two pinches for large containers and baskets. Use good sanitation when pinching, since calibrachoa are known to carry viruses. Florel (ethephon) (350-500 ppm) can be used on baskets and longer-term crops to improve branching. It will slightly delay flowering.

Keep the pH in the mid 5's and watch for iron deficiency. Drench with Sprint 330 or Sprint 138 at 2-4 oz. per 100 gals. to keep the growing tips green. Callies are moderate to heavy feeders and need a constant fertilizer rate of 200- to 250-ppm nitrogen.

PGRs And Pest Control

B-Nine (daminozide) (2,500 ppm) or Sumagic (uniconazole) (10-20 ppm) sprays work to help control growth. A favorite growth regulator technique is to apply a Bonzi or Piccolo (paclobutrazol) drench at 2-3 ppm about mid season. The drench helps produce mounding, compact plants and doesn't appear to affect flower size or significantly delay flowering. Callies vary slightly in vigor and habit, so pay attention to particular varieties, and growth regulate as needed.

Preventive fungicide drenches are highly recommended on this crop, especially for large baskets. Broad-spectrum drenches, such as Subdue Maxx (mefenoxam) and Medallion (fludioxonil) or Truban (etridiazole) and Cleary's 3336 (thiophanate-methyl), work well to control a range of pathogens.

Monitor plants for aphids, and scout the plants regularly. Drenches with systemic insecticides, such as Marathon (imidacloprid), Celero (clothianidin), Safari (dinotefuron) and Flagship (thiamethoxam), will provide long-term control of aphids. For growers in warmer climates with open greenhouses, watch for adult flying moths and subsequent budworms, which can wreak havoc on buds and flowers. **GPN**

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Top: 'Callie Deep Yellow'. Bottom: 'Callie White With Rose Vein 2'. (Photos: Fischer USA)