

Warm Climate Production of *Cuphea* species for Florida

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Cuphea represents a large and sometimes confusing group of plants for Florida producers. The group is comprised of annuals and perennials, as well as upright and trailing forms. This article is designed to provide some introductory information on the group to aid in production of this plant so well suited to Florida production.

Cuphea were originally brought to the United States as a seed oil crop. With potential to supplement feed proteins, and also some household detergents. There are 260 species all told, but only a few of these have made it into the industry. Most species are highly attractive to nectar feeding insects and hummingbirds, which is an additional bonus at the retail level.

The genus *Cuphea* belongs in the family Lythraceae, which makes them distant cousins of the Crape Myrtles. Other than giving me a chance to use a four syllable word, this tells you a lot about *Cuphea* and its production and landscape preferences. All *Cuphea* grow best in full sun and bloom best when in bright light. They are tolerant of low water situations and flower, for the most part, non-stop through the growing season. Some are slightly salt tolerant, but most species are a bit sensitive to salt spray.

A breakdown of the species:



Cuphea hyssopifolia (False Mexican Heather) is one of the most commonly used annuals, renowned for its drought tolerance, constant show of color and ease of production, but this plant is only the tip of the iceberg for

this group of really strong annual and occasionally perennial flowers.

Cuphea hyssopifolia – The false Mexican Heathers, these are the backbone of the commercial

greenhouse industry, dense, dark green foliage (1/4 - 1/2”), tiny white, pink, or lavender flowers and tough as nails in the landscape. Easily grown, from rooted liner to finished gallon is 6-8 weeks.



Cuphea palustris – While rare in the industry this is a promising plant and flowers are similar to False Mexican

Heather, but slightly larger, and more two toned in color. Plant has a much looser form and spills over the edge of the pot, great in baskets.



Cuphea procumbens – A lot of the newer cultivars of *Cuphea purpurea* have flowers up to

1.5” in diameter and if you look closely at them they almost identical to Crape Myrtle blooms. The foliage on these plants is larger (up to 2” in diameter) and the leaf surface is covered with sticky hairs. They have some of the largest flowers a tendency to slow down on flowering in the heat of summer but are very strong in both spring and fall. In mild climates the plants reseed freely. One of the more common cultivars is ‘Firefly’ with crimson blooms. Try these plants in mixed containers and baskets to create a higher dollar return.



Cuphea ignea – These are the cigar flowers, named for their cylindrical blooms that I suppose, look a

bit like cigars. Flower color ranges from red, deep orange to pink. Many cultivars have flowers that resemble candy corn, shading from yellow through orange and into red colors all on one flower. In general these are annuals although many cultivars will become perennial in mild climates. Height is also variable with dwarf forms reaching 8" and taller forms up to 4' in height.



Cuphea varia – These are coming on the market in the south, and have grey toned foliage with pale pink blooms. The growth habit is more open, plants reach 12-14" in height and bloom continuously through the summer.

Cuphea llavea – These are the “bat-faced” *Cuphea* with prominent upper petals and usually red and purple toned flowers. Very easy, and somewhat drought tolerant, although in production wilting really reduces quality. In mild areas a perennial but treated as an annual. ‘Georgia Scarlet’ is one this group, at least I’m fairly sure it is but a quick internet search produced three different species being sold under the same name.



Cuphea micropetala - There is one *Cuphea* that we treat as a perennial here in the south which is a fall and spring bloomer reaching 5-6' in height, with a spread of about 3-4 feet. To my knowledge this is the only *Cuphea* in the industry that is short day flowering. So growers should now to plant this species accordingly, it can be brought in early to get the spring flowering market, or purchased in summer to augment the fall flowering season.

All in all there are almost 40 cultivars on the market, with a rainbow of hues, and the best in landscape performance. They are all easy to produce in most greenhouses, and require little aside from normal bedding plant care to do well. Because of their odd shaped flowers and easy habit, they are very popular in retail nurseries, but wholesale growers may need to promote them a bit as there are enough different types to make it confusing for buyers.

Production guidelines for *Cuphea species*:

Fertilization –In most cases 150 ppm liquid feed, or low level of slow release are adequate for production. Note: *C. procumbens* is generally very light green, so don't fertilize too heavily trying to make it dark green.

Watering – Normal production irrigation is fine, although these plants require a bit of drying between waterings. They are pretty tolerant of dry soil conditions. Too much water will encourage stretching, root rot, and oedema (especially in *C. procumbens*, and *C. lanceolata*).

Media – Any peat lite mix will work well. pH 5.8-6.3.

Production Temperatures – will grow well from 50F-85F, cooler temperatures and high light make for the most compact plants.

Light level – 5,000-9,000 foot candles, bright light is the key to compact plants and maximum blooming.

Propagation – seed, germinates in 7-10 days, seedlings stretch quickly so must be in bright light for compact flats. Also propagated by cuttings, easily rooted in 10-14 days.

Crop timing – Seed to finished crop 8-10 weeks, rooted cuttings to 4" 3-4 weeks, and liner to gallon 6-8 weeks.

Flowering – Continual long day flowering, to the authors knowledge *Cuphea micropetala* is the only commercial short day flowering *Cuphea*. Flowering of some of the *C. procumbens* types slow down in the heat of southern summers.

Pinching required: pinch for bushy growth; once for small pots, twice for larger pots (6") two to three weeks after first pinch

Plant Growth Regulators: If conditions are bright and somewhat dry, usually not needed, otherwise Daminozide at normal rates will work in most cases without overly affecting growth. Always check label before applying.