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Alluring but elusive charms

Rare and exquisite, calochortus has a reputation for being fussy. Coaxing the wildly varied shapes and colors to life may be a challenge, but the blooms reward the effort with dazzle.

By Lili Singer
Special to The Times

Calochortus may spend most of its life hidden underground, but when it finally emerges to stretch in the spring sun, it is nothing short of dazzling. Willowy stems rise to chalice-shaped blooms in lavender, deep red or perhaps yellow with flecks of mahogany. Daintier varieties pop up like minuscule tulips, their little cupped flowers encrusted with wispy hairs.

Sure, daffodils and irises are lovely. But in the world of bulbs, calochortus is that rare, exquisite choice.

"Even the name is euphonious and so beautiful," says ecologist Ileene Anderson. "Cal-oh-COR-tuhs" trills off her tongue. The flower's common names are equally enchanting: mariposa lily, globe tulip, fairy lantern.

Despite such obvious charms, the bulbs have a reputation for being hard to find and difficult to grow. The first problem is eased by the swelling interest in California native plants, including bulbs such as calochortus. This fall nurseries, public gardens and mailorder firms plan to offer an enticing array of calochortus bulbs, which aren't true bulbs but rather underground stem bases called corms.

As for problem No. 2, Anderson offers: "Where they grow in nature will suggest where to put them."

All 60 species hail from western North America, and most are native to California . The plant belongs to the lily family, though some botanists place it in its own family, Calochortaceae. It's fairly easy to distinguish the various types. The tallest ones, called tall mariposas, bear large, upright, chalice-shaped flowers. Their seedpods are long and slender.

The rest are short plants with drooping, three-sectioned seedpods. Globe lilies and fairy lanterns have round, nodding flowers; the petals overlap to form a hollow sphere. Star tulips grow low and have cupped blossoms. Cat's ears and pussy ears are the most compact and have flowers lined with tiny hairs.

Most types, particularly the tall mariposas, need full sun. Others, including globe lilies and fairy lanterns, prefer light shade. Good drainage is crucial for them all, but the real key to success is water — more precisely, the lack of it in summer. Water dormant bulbs in the hot months and they will rot.

Of course, every rule has exceptions.

"Summer rest is not mandatory for pink star tulip [C. uniflorus]," says horticulturist M. Nevin Smith, author of the calochortus section in the book "Wild Lilies, Irises and Grasses."

Menifee gardener Sheldon Lisker has found that C. luteus 'Golden Orb,' a yellow mariposa lily cultivar from the Netherlands, accepts occasional summer water without turning to mush. Since 1994, Lisker has planted 12 calochortus species and cultivars on his 10 acres in the low rolling hills of southwest Riverside County.

To improve drainage, Lisker amends his clayey soil with decomposed granite from his hillside. (Where drainage is hideous, berms and raised beds are alternatives.)

He never feeds the plants, but he does mulch the soil surface with leaves from his garden. He waters most plantings only if winter rains are scarce.

"I also plant deeper than recommended — at least 6 inches down," Lisker says. "The bulbs need protection from summer heat, even in the shade of a tree."

Deep burial also guards the bulbs from birds and rodents, especially gophers and voles.

Come springtime, the results can be spectacular.

"Once the bulbs 'take,' they come back," Lisker says. "But they may not come up every year. Last year, after the rains, they all came up."

Interrupted flowering is not unusual, horticulturist Smith says. Wild calochortus, after all, is a rain- and fire-follower, well-suited to the whims of nature. Some years, a bulb may leaf out but not flower, or it may

disappear for years then return, reinvigorated, for a jaw-dropping floral display.

Lisker's patch of rose fairy lantern, C. amoenus, is enjoying last month's rain. "There must be 15 in bloom at once," he says. "They're breathtaking. And with just a leaf or two to get the motor going, the stems come up through the shrubs, then branch out and flower. So unusual."

"Calochortus" is derived from the Greek for "beautiful grass," referring to the plant's sparse foliage — on a good year, no more than a few thin blades. The flowers are more impressive, with colors that run the gamut: white, pink, orange, purple, brown.

As if splendid colors weren't enough, the inside of each "flower bowl" is embellished with blotches, lines and hairs — designs ostensibly meant to attract pollinators. The best way to identify calochortus is to examine the center of each flower bowl.

"Calochortus have special glands — pads at the base of the petals — that make crystalline sugary stuff, not quite like nectar," says Paul Wilson, associate professor of biology at Cal State Northridge. The gland varies in size and shape among species, and the substance it creates attracts beetles, little bees and other insects.

The plants were cultivated by native tribes for food and dubbed mariposa ("butterfly") by the Spanish for their animated splendor, but Smith writes that almost half of the Golden State's native species are "rare, endangered, threatened or in decline." Major stressors include developers and indiscriminate bulb and flower col-

lectors.

Anderson, a Los Angeles ecologist with the Tucson-based Center for Biological Diversity, has had the "dubious opportunity" to salvage calochortus bulbs from development sites. She has tried transplanting the bulbs to similar environs, but results have been abysmal.

As wild calochortus populations decline, however, new species are still being discovered. C. tiburonensis was found on a Marin County hillside, just yards from civilization. Smith describes it as "a little mouse-eared type," found on a headland popular for hiking.

This year, the catalog for Telos Rare Bulbs in Ferndale, Calif., lists one type of unnamed cat's ears — deep purple with hairy petals — found recently by Telos owner Diana Chapman in an undisclosed Northern California location.

"It may be a new species," she says.
"The seeds are different"

How fortunate for calochortus that some gardeners like "different" — and appreciate a challenge. No doubt, many bulbs will be planted in dry gardens this fall, will flower generously in spring and will sleep many summers in ground where they feel most at home.