

FAIRYDUSTER

Calliandra eriophylla Benth.

Plant Symbol = CAER

Common Names: shrubby fairy duster, pink fairy dusters, stickpea, false mesquite, pink-flowered acacia, charrasquillo, mesquitilla, brasillo

Scientific Names: *Calliandra eriophylla* Benth. var. *Chamaedrys* Isely, *Calliandra eriophylla* Benth. var. *erriophylla*

Description

General: Fairyduster is a native perennial shrub, most commonly 1 to 5 ft (30 to 152 cm) in height, and 3 to 4 ft (91 to 122 cm) in width. It is round domed in shape and densely branched with low spreading gray pubescent twigs.

The leaves are doubly compound and consist of 1 to 7 pairs of leaflets that are 0.4 to 1 in (1 to 2.5 cm) long. There are 5 to 15 pairs of secondary leaflets linear-oblong in shape, 0.04 to 0.008 in (1 to 2 mm) wide and 0.1 to 0.2 in (3 to 5 mm) long, asymmetrical at the base, green-to-gray in color, and covered in short stiff hairs underneath (Munz & Keck, 1973; Wojciechowski & McClintock, 2012). The petioles are 0.2 to 0.3 in (5 to 7 mm) in length (Isley, 1972). The inflorescence is axillary and consists of dense spherical clusters of pinkish white flowers that are 1.25 to 2 in (3 to 5 cm) in diameter and located on short stems towards the ends of the branches. The stamens are 0.6 to 1 in (1.5 to 2 cm) long, come out beyond the length of the blossoms, are white at the base and bright pink at the tips (Armstrong, 1915; Benson, 1945; Wiggins, 1964). Fairyduster's seed pod is 2 to 3 in (5 to 7 cm) in length, 1.2 to 2.8 in (3 to 7 mm) wide, flat, velvety in appearance from its covering of pubescence, silver in color but red and hairless at the margins. The seeds are gray in color, narrow-obovate in shape, 0.25 to 0.28 in (6 to 7 mm) in length, with 1 to 6 seeds produced per pod (Cheatham, 1995; Munz & Keck, 1973, Powell, 1988).

Fairyduster often blooms from February to May, and occasionally after precipitation events during the fall (Wojciechowski & McClintock, 2012). Fairyduster flowers can bloom upright at night, and droop during the daytime (Felger & Rutman, 2015). The genus name, *Calliandra*, comes from the Greek words 'kallos' meaning beautiful, and 'andra' referring to the stamens. The species name *erriophylla* is derived from the Greek words 'erion' meaning wooly, and 'phyllon' meaning leaf, referring to the appearance of its velvety leaves (Wiggins, 1964). Fairyduster can be easily confused with "Baja" fairyduster (*Calliandra californica*), a species endemic to Mexico with deep red flowers, generally a foot taller, and cold hardy to 28° F (-2 °C) as opposed to 15° F (-9 °C), or with dwarf powder puff (*Calliandra tergemina* var. *emarginata*) which is also taller than fairyduster and grows up to 6 ft (182 cm) in height (California Native Plant Society, 2025; Springer, 1994; Rix, 2006). Fairyduster can also be confused with Rio Grande stickpea (*Calliandra conferta*), which has longer peduncles, bright red filaments, grows in limestone and caliche – as opposed to sandy well-draining soils – and is found in South Texas (Powell, 1988; Ladybird Johnson Wildflower Center, 2022).

Distribution: Fairyduster is native to the southwestern United States, and it is found in the Sonoran, Colorado, Mojave and Chihuahuan deserts; from southeastern California through Southern Arizona, New Mexico, western and central Texas, as well as the Rio Grande Plains (Kress & Buchanan, 2000; Arizona Cactus and Native Flora Society & Desert Botanical Garden, 1947; Wasowski, 2000). Fairyduster occurs in greater concentrations west of Texas, in comparison to other *Calliandra* species (Cheatham, 1995). For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.



Figure 1. Fairyduster (Photo by Jim Thomas, USDA NRCS Tucson Plant Materials Center).

Habitat: Fairyduster can be found along canyon walls, banks of arroyos, desert canyons, open rocky hillsides, arid grasslands, dry gravelly slopes, mesas, basins, and typically where subsurface water is available year-round (California Native Plant Society, 2025; Epple, 1995; Kress & Buchanan, 2000; Hastings, 1965). Fairyduster is found at altitudes from 1,000 to 5,000 ft (305 to 1,524 m) but has been documented below 1,000 ft (305 m) in sandy washes and gullies (Munz, 2004). It is one of the few winter blooming shrubs on desert mountain slopes (Nabhan & Desert Botanical Garden, 1988).

Adaptation

Fairyduster is adapted to sandy gravel and decomposed granitic soil with low organic matter content and a pH range of 6.0 to 8.0. Fairyduster thrives in well-draining soils and can be intolerant to heavy clay soils. Once established, fairyduster can be resistant to drought conditions and can withstand extended drought periods due to its adapted leaves, which conserve moisture by closing slightly at night (Arizona Cactus and Native Flora Society & Desert Botanical Garden, 1947; Palomo, 2013; Wasowski, 2000). Additionally, wilted leaves can rejuvenate once they receive water (Epple, 1995). Fairyduster requires warm, open spaces, full sun exposure, and tolerates partial shade; however, flowering can be reduced, and foliage can become sparse in shady conditions (Dodge et al., 1962).

Uses

The potential uses of fairyduster range from habitat restoration, erosion control, pollinator habitat, as a wildlife food source, and in urban landscaping. Fairyduster is a pollinator species that attracts bees, hummingbirds, the merry melipotis moth (*Melipotis jucunda*) and several other species of butterflies (California Native Plant Society, 2025; Nabhan & Desert Botanical Garden, 1998). Fairyduster seeds are eaten by the white winged dove (*Zenaida asiatica*) (Mailliard et al., 1912), and various species of quail, including the masked bobwhite (*Colinus virginianus*), Gambel (*Callipepla gambelii*), Arizona scaled (*Callipepla squamata*) and Mearns (*Cyrtonyx montezumae*) quails (Graham, 1941). Fairyduster leaves can be highly palatable to the mule deer (*Odocoileus hemionus*), the Sonoran white-tail deer (*Odocoileus virginianus*), and to livestock (Graham, 1941; Dodge et al., 1962). Fairyduster has been used as a soil binder for erosion control in landscape restoration efforts due to its vast network of roots (Arizona Cactus and Native Flora Society & Desert Botanical Garden, 1947; Bureau of Land Management, 1996).

Ethnobotany

Multiple Native American tribes have used fairyduster for medicinal purposes. The Yavapai tribe created a decoction from the leaves and stems to use as a gynecological aid taken after childbirth (Moerman, 2009). The Tarahumar tribe boiled the entire plant for several hours, strained the mixture and drank it daily for three months as a remedy for gonorrhea (Pennington, 1963). Additionally, the Rarámuri people of Mexico used fairyduster to dye wool (Irigoyen, 2015).

Status

Threatened or Endangered: No.

Wetland Indicator: No.

Weedy or Invasive: No.

Please consult the PLANTS Web site (<http://plants.usda.gov/>) and your state's Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Planting Guidelines

There are approximately 18,000 seeds per lb (Rowe et al., 2022; USDA NRCS PLANTS, 2025). Fairyduster seeds are not dormant; however, they are encased in a hardy pod, and scarification can increase germination rates (Arizona Cactus and Native Flora Society & Desert Botanical Garden, 1947; Dodge et al., 1962). Its germination can also be promoted by soaking its seeds in hot water for 8 to 24 hours before sowing (Degnan, 2012).

Management

Fairyduster is drought and cold tolerant but will drop its foliage in extreme cold and dry conditions (Theodore Payne Foundation, 2025). It is heat resistant to 100 °F (38 °C) due to deep taproots. It can be deep watered during hot weather to improve its appearance although overwatering should be prevented as its roots can be susceptible to root rot (Mielke, 1993;



Figure 2. Bee foraging on fairyduster flowers (Photo by Jim Thomas, USDA NRCS Tucson Plant Materials Center).

Rankel, 2024). Fertilizer can be applied in the early spring to promote growth (Walters & Backhaus, 1992; Secuianu, 2021). Fairyduster can be naturally pruned by grazers in the wild but can be cut back by tip-pruning once a year in the late spring to promote foliage growth and flowering (Ladybird Johnson Wildflower Center, 2022; Wasowski, 2000).

Pests and Potential Problems

Several species of bruchid beetles (*Stator chihuaha*, *Stator pruininus*, and *Stator limbatus*) may lay their eggs on fairyduster's seed while it is still inside the pod and can continue to breed on it as long as there is enough food supply (Johnson, 1981).

Environmental Concerns

None known.

Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

Seeds and Plant Production

Fairyduster seeds are dispersed from May to August when the seed pod splits along the margin to open and curl back (Felger & Rutman, 2015). Fairyduster should be planted at a depth of ¼ in (0.5 cm) in the spring or fall (Walters & Backhaus, 1992; Alban, 2025). Germination of untreated seeds can take anywhere from 1 to 4 months (Oro Seeds, n.d.), although time to germination can be reduced significantly by soaking the seeds in hot water, then planting them in well-draining soil like a mixture of coarse sand or sandy loam soil and perlite (Secuianu, 2021). Seedlings can be transplanted when they reach roughly 4 in (10 cm) in height and it is recommended to space them 3 to 4 ft (91 to 122 cm) apart (Degnan, 2012; Walters & Backhaus, 1992). The plants have a 7 to 10 day hardening off period (Rankel, 2024). To prevent loss of seeds from natural dehiscence, collect seeds daily from mature pods as soon as they turn brown and store in an airtight container (Arizona Cactus and Native Flora Society & Desert Botanical, 1947; Nokes, 2001).

Cultivars, Improved, and Selected Materials (and area of origin)

Fairyduster is commonly grown from seed or propagated in the horticultural trade, and seed is somewhat readily available from commercial sources (USDA, 2024). Growers in Glendale, AZ, developed 'Sierra Star'®, a more compact, and more tightly branched hybrid between fairyduster and Baja fairyduster. Sierra Star blooms all-year-long, is hardy to 15 °F (-9 °C), and is propagated by cuttings rather than by seeds (Mountain States Wholesale Nursery, 2025; Justia Patents, 2003). Growers in Tucson, AZ, developed 'Maricopa Red', also a hybrid between fairyduster and Baja fairyduster. Maricopa Red is reportedly more cold hardy than Baja fairyduster down to 15 °F (-9 °C), blooms after freezing, and its flowers are a darker red color in comparison to fairyduster and Baja fairyduster (Alban, 2025). Growers in Tucson, AZ, developed 'Mexicali Rose'®, a hybrid between fairyduster and Baja fairyduster, which is dense, round, moderately sized variety at 4 feet tall, with vibrant red flowers, and strong cold hardy features (Civano Growers, 2025; Justia Patents, 2022). Cultivars should be selected based on the local climate, resistance to local pests, and intended use. Consult with your local land grant university, local extension, or local USDA NRCS office for recommendations on adapted cultivars for use in your area.

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