

Planting Desert Wildflowers

SOIL: Desert wildflowers are adapted to slightly alkaline soils with low organic matter, such as those found along sandy washes or rocky hillsides. Our garden soils might be drastically different than what native wildflowers are accustomed to. Growing wildflowers in poor, compacted soils can be extremely challenging. Incorporating organic matter in the form of compost can greatly improve the development of wildflowers in these conditions by loosening the soil, thus enhancing soil aeration and increasing water permeability. Mix 4 to 6 inches of compost into heavily compacted or clay soil to a depth of 6 to 8 inches. Thereafter apply a 1-inch layer of compost to the soil surface annually, since organic matter rapidly decomposes in our arid environment. It is not necessary to till these compost applications into the soil. If your soil is relatively healthy and well-drained, adding compost may not be necessary. In these conditions, seed sowing may only require scratching the top $\frac{1}{4}$ inch of soil with a steel rake. Remember that any soil disturbance will expose weed seeds and allow them to germinate.

TIME TO PLANT: Optimum soil temperatures needed for seed germination vary depending on species. Spring-blooming annuals such as poppies (*Eschscholzia* spp.), lupines (*Lupinus* spp.), and bluebells (*Phacelia* spp.) should be planted October through December. Summer-blooming annuals such as Arizona poppy (*Kallestroemia grandiflora*) and devil's claw (*Proboscidea parviflora*) can be planted in late spring or early summer. Seed planting time also varies for perennials. Penstemons (*Penstemon* spp.), evening primroses (*Oenothera* spp.) and blackfoot daisy (*Melampodium leucanthum*) germinate more readily in the fall. Summer growers such as datura (*Datura wrightii*), desert senna (*Senna covesii*), and desert plumbago (*Plumbago scandens*) germinate in late spring to early summer.

SOWING: After the soil is prepared, level the bed with a rake to create an even surface on which to sow the seeds. The planting will look most natural if the seed is broadcast rather than planted in rows. Toss the seed evenly over the prepared beds. Very small seeds can be mixed with sand, and then sown, in order to broadcast them more evenly. Some hard coated seeds, such as lupine, will benefit from being soaked overnight in water, and then sown. Read package instructions for any other seed that may need some treatment prior to sowing. After sowing, rake the seeds in lightly and cover them with a thin layer of soil, compost or a soil and sand mixture. A light cover of decomposed granite is one of the best mulches available for tiny wildflower seeds. Remember, seed planted too deeply can be a cause of poor germination.

WATERING: Water the seeds daily with a fine mist sprayer, keeping the soil evenly moist until they germinate. Once the seedlings emerge, water every other day, keeping a careful watch on the small plants and not allowing them to dry out. As temperatures cool the frequency can be decreased, but how often seedlings need water depends on the temperature, soil, and amount of rainfall. Once the plants are showing 4 to 5 leaves and are well established, a deep soaking once a week or less often will suffice. For maximum seed production, continue watering until the flowers finish blooming.

THINNING: Annuals often come up in dense clusters or with a wide variety of grasses and undesirable plants. It is advisable to thin the seedlings as early as possible, cutting with scissors if they are too small or tightly spaced, in order to prevent root damage. Weed regularly, to prevent too much crowding and competition for a better bloom.

BIRDS: Birds are attracted to freshly seeded wildflower beds. Bird netting is easy to use in areas that are small. Another method of protection is spreading a thin layer of dried leaves or compost over the wildflower bed. Planting wildflower seeds in a mulch of decomposed granite also works well, concealing the seeds from birds.

SEED COLLECTION: If you wish to collect seed from your wildflowers for sowing next year, clip the seed heads when most of the seed is mature. Most seed heads turn brown or dark as they begin to ripen, but watch carefully so that the fruit is not so ripe that it splits and disperses seed. Spread the seeds in a single layer on a tray or paper towels in a warm, dry place until they have dried completely. Once separated from the chaff, seed can be stored in an airtight container in a cool, dry place.

SOME SUGGESTED WILDFLOWERS FOR THE PHOENIX AREA

Spring Bloom

Yellow cups (A)

Desert bluebells (A)

Lacy phacelia (A)

Mexican gold poppy (A)

California poppy (A)

Bladderpod (A)

Lemon beebalm (A)

Emory's rock-daisy (A)

Chia (A)

Thistle (P)

Purple mat (A)

Baby blue eyes (A)

Sand-verbena (A)

Esteve's pincushion (A)

Desert lupine (A)

Arroyo lupine, Succulent lupine (A)

Parry penstemon (P)

Owl's-clover (A)

Paintbrush (P)

Prickly stars (A)

Firewheel (A)

Fragrant evening primrose (P)

Pale evening primrose (A)

Globemallow (P)

Firecracker penstemon (P)

Paperflower

Brittlebush (P)

Goodding's-verbena (P)

Bluedicks (P)

Fleabane (A/P)

Desert onion (P)

Fendler's bladderpod (P)

Camissonia brevipes

Phacelia campanularia

Phacelia tanacetifolia

Eschscholzia californica ssp. *mexicana*

Eschscholzia californica ssp. *californica*

Lesquerella gordonii

Monarda citriodora

Perityle emoryi

Salvia columbariae

Cirsium neomexicanum

Nama hispidum

Nemophila menziesii

Abronia villosa

Chaenactis stevioides

Lupinus sparsiflorus

Lupinus succulentus

Penstemon parryi

Castilleja exserta syn.

(*Orthocarpus purpurascens*)

Castilleja chromosa

Eriastrum diffusum

Gaillardia pulchella

Oenothera caespitosa

Oenothera pallida

Sphaeralcea ambigua

Penstemon eatonii

Psilostrophe cooperi

Encelia farinosa

Glandularia gooddingii syn.

(*Verbena gooddingii*)

Dichelostemma capitatum

Erigeron divergens

Allium macropetalum

Lesquerella fendleri

Summer Bloom

Trailing windmills (P)
Golden dyssodia (P)

Arizona-poppy (A)
Coyote gourd (P)
Buffalo gourd (P)
Sacred datura (P)
Devil's claw (A)
Golden crownbeard (A)
Desert-marigold (P)
Blackfoot-daisy (P)
Mexican hat (P)
Chocolate flower (P)
Southwestern prickly poppy (P)
Desert blue eyes (P)
Desert senna (P)
Sunflower (A)
Desert Four O'clock (P)
Rough menodora (P)
Arizona foldwing (P)
Desert rose-mallow (P)
Arizona monardella (P)
Desert plumbago (P)
Mealy-cup sage (P)
Winecups (P)

Allonia incarnata
Thymophylla pentachaeta
(*Dyssodia pentachaeta*)
Kallstroemia grandiflora
Cucurbita digitata
Cucurbita foetidissima
Datura wrightii
Proboscidea parviflora
Verbesina encelioides
Baileya multiradiata
Melampodium leucanthum
Ratibida columnifera
Berlandiera lyrata
Argemone pleiacantha
Evolvulus arizonicus
Senna covesii
Helianthus annuus
Mirabilis multiflora
Menodora scabra
Dicliptera resupinata
Hibiscus coulteri
Monardella arizonica
Plumbago scandens
Salvia farinacea
Callirhoe involucrata

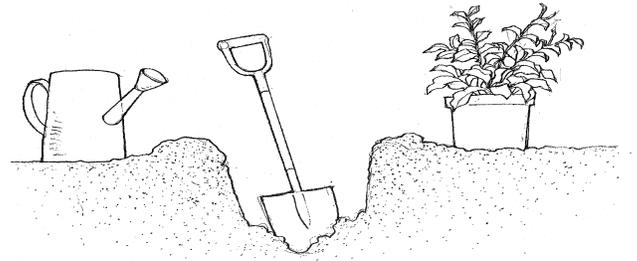
(A) Annual

(P) Perennial

Need Help?

For more information about particular desert plants or problems, call the Desert Botanical Garden's Plant Hotline, 480-481-8120, Monday through Friday, from 10:00 – 11:30 a.m. or email your questions to planthotline@dbg.org

The Desert Botanical Garden provides a range of services to homeowners including a desert Plant Hotline, a variety of classes about landscaping and gardening in the desert, an onsite library, and an extensive selection of resources in the Garden Shop.



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