



FAR WEST BULB FARM

CALIFORNIA NATIVE BULBS

californianativebulbs.com



GROWING INSTRUCTIONS (2 pages)

ALL BULBS...

BEST TIME TO PLANT: Autumn is by far the best time for planting. Planting after the first or second major rain in the fall is excellent. You can store the bulbs in a cool, dry place (the floor of your closet may be ideal) until the right time. No soil amendment is necessary if the species comes from conditions similar to their new home, although adding soft rock phosphate to the planting soil is helpful for all bulbs, and woodland bulbs may benefit from additional humus (one third by volume, thoroughly mixed in, mainly to improve the texture) if your soil doesn't already contain any. **Never** add manure as a soil amendment! For bulbs requiring very good drainage, place some sand (granitic is best) under the bulb, or plant on sloping, rocky banks. A general rule is to plant bulbs at a depth of two times the size of the bulb.

GOPHERS: It seems that gophers usually avoid the strong-tasting Alliums, but you should protect all others from gophers by planting in a tube of small-mesh aviary wire. A tube allows the many bulbs that do so to pull them selves down.

TREE SQUIRRELS: If you have tree squirrels, you may have to protect against them also; they relish bulbs as a change from fungi. A six inch square piece of aviary wire buried horizontally an inch below the ground generally foils them.

WATERING: Wait for nature to do the watering, unless the rains haven't started by mid-October. If they stop early, you can safely water into April, or May if it is cool. *Most* native bulbs hate a combination of high soil temperature and moisture, and start to rot.

Note: When you are planting outside the bulb's natural range, other adjustments may be necessary; for example, if you have low rainfall, you may have to amend the soil of the new home of a higher rainfall species to hold more moisture. If you live in a very hot area, plant a little deeper and provide an inch of organic mulch to cool the bulbs. A low-rainfall or alpine species may need sharp gravel (similar to a rock garden) to help drainage if it is to live where there is high rainfall. If you don't want the extra trouble, plant species adapted to your local area!

PLEASE, REALIZE THAT THE BULBS HAVE BEEN RECENTLY DISTURBED by removing them from their growing tubs. Don't be disappointed if they don't flower the first year, and in the case of lilies, probably longer. Native bulbs take time to re-establish themselves!

ALLIUMS...

Most native wild onions require good drainage and dry summer conditions. Plant all these not too deep, no more than 1" of soil cover.

A. abramsii — This species is from the higher foothills of the Sierra, where it grows in decomposed granite in pockets of granite slabs. It is adaptable to other conditions as long as it has good drainage. Prefers full sun, and will naturalize itself by self-seeding.

A. membranaceum, A. campanulatum — These species prefers gravelly or rocky clay soils and good drainage, and are often found growing on steep banks. Tolerate more shade than most Alliums. An excellent home is under native oaks.

A. crispum — This lovely species prefers gravelly or rocky clay soils and good drainage, and it is found growing on sloping clay and hot serpentine sites as well as open woodlands and grasslands. Prefers mostly full sun. It is easy to grow so long as it is kept dry in summer.

A. dichlamydeum — This colorful species is found growing in coastal prairie and scrub near the coast, thriving in dry, often rocky soils. Given good drainage and full sun, it is easy to grow, and tolerates some summer water.

A. peninsulare — Prefers growing in the filtered shade of native oaks. It is adapted to heavier soils, provided there is good drainage.

A. sanbornii spp. sanbornii, A. fimbriatum, A. diabloense, A. falcifolium — These species do best in sunny rock gardens and serpentine areas with poor, shallow soils. All are tolerant of poor soils and heat. Plant only in well-drained sites that are in full sun.

A. unifolium, A. hyalinum — Both these species are very attractive and easy to grow, accepting full sun to partial shade and a variety of soil types. Both tolerate summer irrigation if in well-drained soil and both often spread about the garden by seed and offsets.

BLOOMERIA...

B. crocea — Prefers full sun to light shade and is found growing in open woodlands, chaparral and grasslands in central and southern California. Native habitats have gravelly, clay soils with good drainage. Requires dry summer conditions. Cover with 2" of soil in early fall, in groups for best effect.

BRODIAEAS...

B. appendiculata — Enjoys heat and full sun, and is found growing at lower elevations down to the Valley floor. Found in gravelly, clay soils, this species likes lots of moisture during winter and spring with summer drought. Cover the corms with 1 1/2" of soil.

B. californica, B. elegans, B. minor and **B. purdeyi** — These species all prefer full sun, rocky to gravelly soils, tolerates clay soils if well-drained. Compete well with grasses. They like plenty of moisture in the winter and spring months, but should be left dry in the late summer and early fall. Cover the corms with 2" of soil. They make the best show if planted (about 10 to 18" apart) to form a group.

CALOCHORTUS...

C. albus and **C. albus v. rubellus** — Grow in open, partially sunny woodlands and are often seen on steep slopes and road cuts. The ideal habitat is oak woodlands in well-drained soil with moderate amounts of organic matter. *Rubellus* can tolerate quite deep shade and still flower. Supplement watering during winter and early spring if the rains are less than normal, but do not water during hot summer months. Cover with 2" of soil.

C. amabilis, **C. amoenus** and **C. pulchellus** — Best planted in filtered shade of native trees or shrubs. Requires well-drained soils, or, if grown in heavier soils, plant on a steep bank. Supplement water during winter/spring if the rain is less than normal, but do not water during hot summer months. Cover bulb with 2" of soil.

C. superbus, **C. catalinae** and **C. luteus** — Prefer hot, sunny meadows with plenty of grass or native shrubs to shade the roots. Do well in rocky clay soils. Supplement watering in winter and early spring if the rains are less than normal, but do not water during summer months. Cover with 2" of soil.

C. monophyllus and **C. tolmiei** — Found growing in open oak/pine woodlands of the Sierra Nevada foothills, they prefer part shade and well-drained soil with moderate amounts of organic matter. Supplement watering during winter and early spring if the rains are less than normal, but do not water during summer months. Cover with 2" of soil.

C. nudus — Prefers filtered shade and loamy soils. Native habitats include vernal moist foothill and montane meadows. Supplement water during winter/spring if the rains are less than normal, but do not water during the hot summer months. Cover with 2" of soil.

C. simulans — Grows in full sun or filtered shade of native chaparral. Prefers very gritty soils with good drainage. Do not summer water. Cover bulbs with 2" of soil.

C. splendens, **C. clavatus**, **C. leichtlinii** and **C. venustus** — Grow in full sun or filtered shade of native shrubs and pines. Do not summer water. Prefer granitic, rocky, lean soils, and completely dry summers. In clay soils, amend with gravel and plant on slopes to improve drainage. Cover bulbs with 2" of soil. NB: *C. leichtlinii* is best planted in higher elevation gardens with a definite winter climate.

C. uniflorus — Usually found growing in vernal wet meadows amongst native grasses and sedges, in full sun. Plant in sun, covering bulb with 2" of soil. Can have some summer water, especially early on.

C. vestae and **C. argillosus** — Found in full sun on coastal grasslands. You can grow them in open meadows or mixed in a native border. Prefer well-drained gravelly clay soils and completely dry summers—good drainage is important. Cover with 2" of soil.

CHLOROGALUMS...

C. pomeridianum — Easy to grow in either full sun or part shade in almost any soil. Generally not bothered by gophers. Enjoys ample winter and spring moisture with summer drought. Cover with 3" of soil.

DICHELOSTEMMAS...

D. ida-maia, **D. congestum**, **D. multiflorum**, and **D. capitatum** — These species can grow in full sun (if the roots are shaded by grass or shrubs) to filtered shade and gravelly, well-drained clay soils. They like plenty of moisture in the winter and spring months, but leave dry in the late summer and early fall. Note that *D. ida-maia* depends on the support of tall native grasses or equivalent. Cover with 2" of soil. Easy to grow and can form large colonies from offsets. They make the best show if planted (about 10 to 18" apart) to form a group.

D. volubile — Grows in full sun or filtered shade and prefers to climb on a shrub or fence. It wants plenty of winter and spring moisture with dry conditions in late summer and autumn. Plant the bulbs near a native shrub in early fall. Cover with 2" of soil.

ERYTHRONIUMS...

E. californicum and **E. multiscapoideum** — Ideal for the sunny rock garden or partially shaded woodland. They are often found on rocky slopes. Require soil with good drainage. They like ample moisture in the spring, but should dry out after flowering. Cover with 2–3" of soil in a well-drained place. They look best planted in groups of six or more. Once planted, they are best left undisturbed.

E. tuolumnense and **E. "Pagoda"** — Easy to grow, and prefer a little summer water. Best with broken shade as in a woodland or partially shaded rock garden. Increase by offset corms. Plant with 2" soil cover over bulbs in well-draining soil containing good organic matter. They do not like to be transplanted, so it may take a couple of years before they flower.

LILIUMS...

L. humboldtii — Grows in open woodlands in the Sierra Nevada foothills. It prefers partial shade and well-drained soil with moderate amounts of organic matter. It should receive ample winter and spring moisture, and be allowed to dry out during summer and fall. Planting among shrubs in rocky areas helps protect from deer and gophers. Soil depth over the bulb should be three times the height of the bulb. Don't ever disturb after it is established. Remove flowering heads after flowering to increase the vigor of the bulb (unless you want seeds!). May take some time to recover from transplanting.

TRITELEIAS...

T. bridgesii and **T. ixiodes v. scabra** and **v. analina** — Prefer filtered afternoon shade and do well under native oaks, pines and various native shrubs. Prefer gravelly clay soils with good drainage. Cover with 2" of soil in early fall, in groups for best effect. Do not plant *T. ixiodes v. analina* below 2500'; it needs freezing winter conditions to thrive.

T. hyacinthina — Prefers moisture during the spring until June, and is easy to cultivate. It likes vernal moist, sunny meadows. Cover with 2" of soil, in groups of six or more near each other for best effect.

T. laxa — A robust species that prefers sunny, hot meadows, or filtered sun near native oaks, with plenty of winter moisture. Stunning planted in large drifts. Tolerant of clay soils, but requires summer drought. Cover with 2" of soil.

T. peduncularis — Prefers moisture well into the late spring, as it naturally grows near streams, swales, and marshes. Plant in gravelly soils in full sun to partial shade. Cover with 2" of soil.