

DESERT ZINNIA

Zinnia acerosa (DC.) A. Gray

Plant Symbol = ZIAC

Contributed by: Tucson Plant Materials Center



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Alternate Names

Dwarf Zinnia, Wild Zinnia, White Zinnia and Spinyleaf Zinnia

Uses

Forb component of seeding, disturbed sites and landscaping.

Status

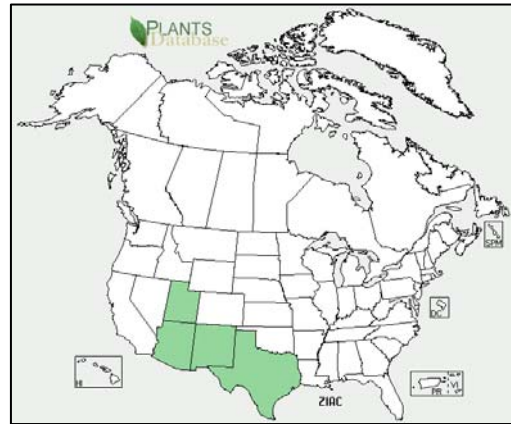
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Description

Desert zinnia is a small shrub-like perennial forb native to Arizona, New Mexico and Texas. It reaches heights of 4 to 10 inches with numerous branches and has scores of narrow leaves 0.75 to 1.5 inches long. The flowers have 5 to 7 white to off-white to pale yellow ray flowers and 8 to 13 yellow disc flowers. The ray flowers may be somewhat toothed at the ends. Desert zinnia may flower from spring to fall when moisture is available.

Desert zinnia generally occurs on rocky open slopes and flats often on calcareous soils. It occurs at elevations of 2,300 to 6,200 ft.

Distribution:



Establishment

Desert zinnia may be direct seeded by broadcasting or drill seeding. It may also be propagated in plugs or pots and transplanted. Desert zinnia has approximately 760,000 seeds per pound. Seed is produced from summer to fall, but more consistently in the fall. The broadcast seeding rate is 2.2 PLS (pure live seed) per acre. The drill seeding rate is 1.1 PLS per acre.

Seed should be planted onto a firm, weed-free seedbed. Broadcast seeding should be followed lightly with a cultipacker or harrow to provide seed with a shallow covering of soil. When used as part of a mix, the seeding rate should be adjusted to the desired percentage of the mixture.

Desert zinnia should be propagated in containers filled with a well drained soil mix. Seed sowed into containers should be covered with approximately ½ inch of soil.

Management

Desert zinnia may be mowed and it seems to tolerate burning. Pre-emergent herbicide such as Oryzalin may be used to control weeds. The plants benefit from light fertilization. Irrigation should be applied sparingly and only when the plants are actively growing. It may be removed by applying glyphosate when foliage is actively growing.

Pests and Potential Problems

Desert zinnia has no serious pest problems. It may be consumed by rabbits or ants when young. It is adapted to arid conditions and is thus susceptible to root rot if over watered. During periods of high

rainfall it may also be infected by the flower blight (*Alternaria alternata*).

Seeds and Plant Production

Desert zinnia may be produced under typical crop conditions. When harvesting with a flail vac it may be necessary to space rows to allow the flail vac to get close to the ground. This may be accomplished by skipping a row where the edge of the flail vac will pass or by using wide spacing on beds. Seed loss may be a concern when harvesting with a flail vac. Other harvest methods may prove more efficient.

Although desert zinnia flowers from spring to fall, the most productive seed harvest is in the fall. Desert zinnia is a prolific seed producer. Seed produced under crop conditions seem to have appreciably higher percent germination than those collected from the wild.

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

Batamote germplasm desert zinnia was developed by the Tucson Plant Materials Center for use in Major Land Resource Area 41 (EPA Level 3 Ecoregion 79) of southeastern Arizona. It is a composite of 9 accessions collected from native desert zinnia stands in southeastern Arizona.

References

Colbaugh, W.A., W.A. Mackay and S. George. 2001. *Alternaria alternata* flower blight of *Zinnia acerosa* in Texas. *Plant Disease*. 85(2):228.

Hickman, James C., ed. 1993. *The Jepson manual: Higher plants of California*. Berkeley, CA: University of California Press. 1400 p.

Kearney, T.H. and R.H. Peebles. 1969. *Arizona flora*. University of California Press, Berkeley, CA.

USDA, NRCS. 2004. PLANTS Database, Version 3.5 (<http://plants.usda.gov>). [National Plant Data Center](http://plants.usda.gov), Baton Rouge, LA 70874-4490 USA.

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