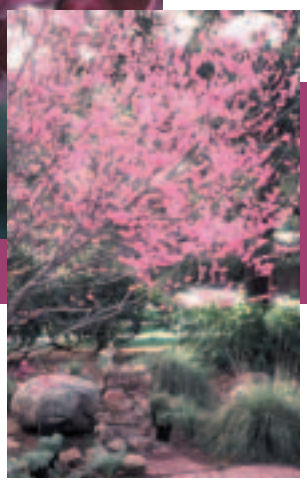

Propagation protocol for

CALIFORNIA REDBUD

(*Cercis orbiculata* Greene)

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KEY WORDS

Cercis occidentalis, Fabaceae, container

NOMENCLATURE

USDA NRCS (2004)

California redbud *(Cercis orbiculata* Greene [Fabaceae]; synonym = *Cercis occidentalis* Torr. ex Gray var. *orbiculata* (Greene) Tidestrom) is a distinct, multi-stemmed, small deciduous tree with attractive spring flowers on predominantly leafless stems. It is found in dry slopes, canyons, ravines, streambanks, and chaparral and foothill woodlands of the Sierra Nevada of California and in local areas in Arizona and southern Utah. Within its range, this native, drought-tolerant tree has tremendous ornamental merit for the home landscape, producing flowers that are magenta-pink to reddish-purple or occasionally white, glossy reniform shaped leaves, and an attractive open branch structure.

At Sequoia and Kings Canyon National Parks, we collect the woody legumes after leaf fall during fall and early winter. Pods are opened by hand to remove the hard round seeds. Once removed from the pods, we scarify the seeds using a hot water soaking treatment. Heated water (93 °C [200 °F]) is poured over the seeds, and seeds are left to soak in water as it cools overnight. The next morning we repeat the process. Floating seeds are not viable and are removed. We plant seeds immediately after treatment.

We sow seeds into flats scrubbed and sterilized with a 10% bleach solution (9 parts water to 1 part off-the-shelf bleach). Flats are 6.3 cm (2.5 in) deep and filled with a sterile, well-drained 3:1 (v:v) medium:perlite mixture. A local company prepares our medium, which consists of 60% forest humus and fir sawdust and 40% construction-grade sand, along with a proprietary blend of ureaform, nitriform, triple super phosphate, potassium nitrate, dolomite, iron sulfate, and ammonium nitrate. The resulting medium is treated in a soil sterilizer (88 °C [190 °F]). The planted seeds need to be kept evenly moist until they germinate, which occurs within 2 wk. After germination, we allow the medium to dry down between irrigations and increase air circulation because California redbud is susceptible to *Pythium* and *Phytophthera.* If damping-off is noted, we apply Subdue systemic fungicide at a rate of 8 drops per 3.8 l (1 gal). When seedlings have 2 true leaves, we transplant them into Ray Leach Super Cells™ (164 ml; 21 cm tall x 6 cm wide [10 in^3; 8 x 2.5 in]) cleaned and sterilized as described above. Containers are filled with the same medium but at a 2 humus:1 perlite (v:v) mixture. After transplanting, we topdress the containers with Osmocote 14N:14P_2O_5:14K_2O (3 to 4 mo release rate; The Scotts Company, Marysville, Ohio). Seedlings are watered after the medium has dried down well. After 7 to 8 mo, seedlings are 15 to 20 cm (6 to 7 in) tall and ready to be outplanted.

REFERENCE

[USDA NRCS] USDA Natural Resources Conservation Service. 2004. The PLANTS database, version 3.5. URL: http://plants.usda.gov (accessed 12 Jan 2005). Baton Rouge (LA): National Plant Data Center.

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