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From Forest Nursery Notes, Summer 2009

**31. © Osha (bear root) *Ligusticum porteri* J.M. Coult. & Rose var. *porteri*.** Terrell, B. and Fennell, A. Native Plants Journal 10(2):110-118. 2009.

# OSHÁ (BEAR ROOT)

*Ligusticum porteri* J.M. Coult. & Rose var. *porteri*

| Bernadette Terrell and Anne Fennell

## ABSTRACT

Oshá roots (*Ligusticum porteri* J.M. Coult. & Rose var. *porteri* [Apiaceae]) are prized by Native Americans as a medicinal for respiratory illnesses; roots from wild stands are most commonly used. Native to the western and southwestern US, oshá is a slow-growing plant that takes up to 10 y to reach harvestable mass in the wild. Demand for *L. porteri* has been increasing and over-harvest threatens native stands. Attempts to propagate oshá for replenishing native stands and for developing alternatives to wild harvest have been inconsistent and variable by seed source. Simple seed stratification methods were tested to propagate plants for sustainable production of oshá. Seed germination of 3 commercial seed sources (New Mexico, Utah, and Colorado) improved when the stratification period was adjusted for origin of seeds. An increased duration of stratification (>10 wk) was required for the more northern sources. These results indicate that common seed stratification can be used to develop nursery plants for re-establishment and production of harvestable roots.

Terrell B, Fennell A. 2009. Oshá (bear root) *Ligusticum porteri* var. *porteri* Coult. & Rose. *Native Plants Journal* 10(2):110–118.

## KEY WORDS

seed dormancy, stratification, GA<sub>3</sub>

## NOMENCLATURE

USDA NRCS (2008)

All photos by Bernadette Terrell.

Figure 1. Oshá (*Ligusticum porteri* J.M. Coult. & Rose var. *porteri* [Apiaceae]).

## GEOGRAPHIC DISTRIBUTION

*Ligusticum porteri* J.M. Coult. & Rose var. *porteri* (Apiaceae), a perennial forb native to the Rocky Mountains, has many common English names including bear root, Porter's lovage, mountain lovage, cough root, Porter's licorice-root, and Porter's wild lovage, whereas Native Americans know it as oshá, canli icahiye, or chuchupate (Figure 1). Oshá thrives at elevations ranging from 366 m to 3353 m (1200 ft to 11 000 ft), and it is indigenous to Arizona, Colorado, Montana, Nevada, New Mexico, Utah, and Wyoming, and parts of North and South Dakota in very sparse stands (Figure 2). Plants are found along steep inclines, ravines, and open fields and appear to be associated with aspen trees in some regions (Johnson and others 2001). It can withstand dry conditions