Abies lasiocarpa, subalpine fir

Abies lasiocarpa, subalpine fir, is the smallest of eight species of true fir native in western North America. It is very similar in appearance to our local Sierra endemic, A. magnifica (red fir / silvertip), when young (<100yrs). Both species are extremely elastic and adapted to high elevations, extreme cold, and heavy snowpacks. The subalpine fir is distinguished by a narrower conical crown at maturity.



Abies lasiocarpa range (source: USDA)

Abies lasiocarpa is broadly distributed from 62° N. in Alaska and 64° N. in Yukon Territory to 32° N. latitude in Arizona and New Mexico. Though frequently found growing at or just below tree line, it has a huge elevational range, occurring from sea level in Alaska to 12,000 ft in Arizona. It is found in many different mountain ranges as well as montane and lowland forests.

Because of its great range, *Abies lasiocarpa* has gathered many common names. *Abies* are true fir. The specific epithet "*lasiocarpa*" means "woolly seed" (e.g. woollyseed fir). Here are some titles: subalpine fir, alpine fir, balsam fir, white fir, mountain balsam fir, white balsam, western balsam fir, Rocky Mountain fir; *pino real blanco de las sierras*, *sapin concolore*. Subalpine fir is generally the "accepted" common name for the species.

Though we'd LOVE to use and plant local red fir / silvertip in landscapes, like white fir, it is seldom grown, extremely slow growing, and a challenge to transplant and establish (as are many drought-adapted Sierra species). Subalpine fir is also infrequently grown but we, occasionally, are fortunate to find growers who have it. Unlike red and white fir, subalpine fir transplants well, establishes easily, and looks amazing and natural in mountain landscapes. Subalpine fir manages to establish root systems on extremely severe sites including talus slopes, avalanche paths, lava flows, and recent burn scars. It also has the unique ability to reproduce by layering (rooting from low-lying branches, stems, or wind-swept leaders that contact the ground).

One genetic variety of A. lasiocarpa is native to the Rockies and peaks of southwestern Colorado, Arizona,



and New Mexico. *Abies lasiocarpa var. arizonica* is commonly known as corkbark fir because of its appearance at maturity. This variety has a blueish tint (as with our native east-side Jeffrey pine and Colorado blue spruce). The "blue" is a waxy lattice on the needle surfaces, an adaptation that protects these plants from summer moisture loss, winter desiccation, and from high elevation sunburn. Unlike spruce, fir needles are very soft and

Abies lasiocarpa var arizonica range (source: USDA)

a better choice where people might brush against them. The upright fir

cones are distinctively purple.

Corkbark fir grows well (≥ 2 ft / year) in full sun to partial shade, in most soils, with minimal irrigation

needs and drought tolerance once established. It is verticillium wilt resistant. Trees do establish quickly and offer a uniform pyramidal shape and attractive dense foliage (more needles per twig than other species) making them ideal for screening (or for large hedges or growing your own Christmas trees).

We found a grower last fall 2024, and ordered trees for this summer 2025. We purchased the entire crop and for a moment, have a good supply of 6-8' *Abies lasiocarpa var. arizonica*. And while we want some for our late-winter / early-spring stock, we have more than we really need and would love to see some go into landscapes



this fall. Until mid-November 2025, when we've tucked-away most plants, they are 30% off.