



Manzanitas

Of all the native shrubs in north central Arizona, manzanita is the most popular. Gardeners love this plant for its graceful form, reddish bark, flowers and fruit, and drought tolerance. For these reasons, people want to plant more of it in their landscapes. However, it is not readily available in most retail nurseries probably because it is somewhat slow to grow and post-planting survival is sometimes variable.

Manzanita is related to heather (Family: Ericaceae). Four species of manzanita are found in northern Arizona. In Yavapai County, we have three species: yellowleaf manzanita (*Archtophylos pringlei*), pointleaf manzanita (*A. pungens*), and greenleaf manzanita (*A. patula*). All grow between 2 and 4 meters tall, have reddish bark, and grow on slopes between 3,500 and 8,000 feet in elevation. These species are usually difficult to find in local nurseries, but some small, native plant nurseries may have them.

Bearberry or kinnikinnick (*A. uva-ursi*) is a prostrate growing manzanita species. It creeps along the soil surface reaching a height of 15 cm (6 inches) and is grown commercially by nurseries in California. It is native to Arizona in the Lukachukai Mountains of the Navajo Nation. This is a good choice for landscapes due to its low growth and decreased fire hazard.

Some adventurous gardeners enjoy propagating their existing manzanita plants using "air layering". Here a young Manzanita shoot is lightly scored with a sharp, clean knife then "pinned" (using a "U" shaped piece of wire) into the soil (or a pot containing soil) where it will take root. You could also apply some rooting hormone (naphthaleneacetic acid: NAA or indolebutyric acid: IBA or a combination) to the clean wound. Provide intermittent irrigation to the soil around the shoot to promote root growth. After roots become established, the rooted plant can be severed from the mother plant, allowed to recover, and transplanted in the fall following recovery.

Manzanita plants can also be grown from seed although some treatment is necessary to break the hard seed coat. To prepare the seed, fruits are soaked in water to remove the fleshy pulp. Commercial growers soak seeds in sulfuric acid for 3 to 6 hours. Sulfuric acid is very caustic and not recommended for home use. Similarly, seeds can be mechanically abraded with a file or sandpaper. Experienced growers may use a blender.

In nature, manzanita seeds germinate following fire. Fire provides a combination of exposure to heat/smoke and seedbed preparation. To mimic this natural process, some propagators sow seeds in a flat and burn a 3 to 4 inch layer of pine needles on top of the seedbed. Seeds may take a year to germinate. Once seedlings germinate, they are transplanted to nursery containers, provided with irrigation, and grown for a period before transplanting.

Before you get totally inspired to grow manzanita, I should interject a word of caution: living manzanita plants contain a high percentage of volatile compounds, which, if preheated by advancing fire, will burn like a torch when ignited. They also carry a large amount of dead wood, making them all the more flammable. Manzanita can act as a ladder fuel in landscapes, especially when planted adjacent to flammable structures such as homes, decks, fences, and trees. Ladder fuels carry fire from the ground where it can be controlled to treetops and structures where it is difficult to control. Avoid these risks by isolating manzanita plantings away from flammable plants or structures and by periodically removing the dead wood.

Native manzanita plants are usually found on dry sites with well-drained soils. Established manzanita should be irrigated carefully if at all – too much water can damage or kill established manzanita. Similarly, fertilizers should not be applied to these hardy native plants. Locally adapted native plants can and will form beneficial relationships with soil microorganisms such as mycorrhizal fungi if left to their natural tendencies. These beneficial relationships are less likely to develop where nutrients are abundantly available. Native plants are best grown without fertilizers.

Manzanita is an integral component of our chaparral vegetation community and provides benefits for wildlife, birds, and insects. Hummingbirds, moths and butterflies, and other insects are attracted to the urn-like flowers. Growing manzanita is not easy, but it can be done - if you dare.



Photos of pointleaf manzanita (*Arctostaphylos pungens*) growing in Prescott, Arizona. The image on the left is of a mature plant (photo by Jeff Schalau, UA Cooperative Extension). The photos on the right show flowers (top, photo by Doug McMillan, Yavapai County Master Gardener), bark and fruit (photos by Jeff Schalau, UA Cooperative Extension).

Additional Resources

Yellowleaf manzanita (*Arctostaphylos pringlei*)

Yavapai County Native and Naturalized Plant Database

<https://cals.arizona.edu/yavapaiplants/SpeciesDetail.php?genus=Arctostaphylos&species=pringlei>

Pointleaf manzanita (*Arctostaphylos pungens*)

Yavapai County Native and Naturalized Plant Database

<https://cals.arizona.edu/yavapaiplants/SpeciesDetail.php?genus=Arctostaphylos&species=pungens>

Greenleaf manzanita (*Arctostaphylos patula*)

Yavapai County Native and Naturalized Plant Database

<https://cals.arizona.edu/yavapaiplants/SpeciesDetail.php?genus=Arctostaphylos&species=patula>

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