

Plant Data Sheet



U.S. Forest Service

Species (common name, Latin name)

1. Pacific Madrone, Madrono, Madrona, *Arbutus menziesii*

Range

1. Vancouver Island to San Diego on the Pacific Coast

Climate, elevation

1. Diverse climate: *A. menziesii* can be found in climates with as little as 15" to as much as 100" of rainfall per year. The can grow as high as 7000' so long as temperatures do not get too cold.

Local occurrence (where, how common)

3. Drier lowland areas, comprising >20% of the tree canopy

Habitat preferences

2. Prefers rocky well drained areas, even a lengthy drought period.

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)

1. *A. menziesii* dominates after forest fires and other major disturbance that leave an area without a seed source for an old growth species.

Associated species

1. *Pinus coulteri*, *Quercus chrysolepis*, *P. menziesii*, and *Umbellularia californica*.

May be collected as: (seed, layered, divisions, etc.)

4. Seeds can be collected, more commonly new trees arise from root crown sprouts.

Collection restrictions or guidelines

4. Berries ripen September through November and may be collected then.

Seed germination (needs dormancy breaking?)

4. Seed stratification is necessary to break dormancy. Place seeds inside a small plastic bag containing moist medium and store at a temperature just above freezing for 35-45 days. Seed should germinate in 10 days.

Seed life (can be stored, short shelf-life, long shelf-life)

4. Berries can be thoroughly dried and stored at room temperature for 1 to 2 years. Seed should be extracted from berries, dried, and stored in a sealed container at temperatures just above freezing.

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)

2. Best if sprouted new from old root mass destroyed in a forest fire, if you wish to save one in your yard you might want to burn it to the ground!

Soil or medium requirements (inoculum necessary?)

4. *A. menziesii* is highly susceptible to fungi, research indicated that bare mineral soil is the best method to propagate.

Installation form (form, potential for successful outcomes, cost)

Considering the tendencies of this species installation can be highly successful with desired form being achievable through control, sometimes costly, of environmental factors.

Recommended planting density

4. The denser the planting the better the form: Tall slender and graceful trees result from communities where as individuals tend to be squatter. This is a result of the microclimate the species establishes for itself.

Care requirements after installed (water weekly, water once etc.)

2. Water studiously the first three to five years. Do not water when hot and dry.

Normal rate of growth or spread; lifespan

2. Slow growing, *A. menziesii* may reach 80'-100' in height over a 200-250 year lifespan. Trunks may reach 3' in diameter.

Sources cited

1. http://biology.fullerton.edu/courses/biol_445/Web/madrone.htm
2. <http://students.washington.edu/melliott/arbutus/990714thescooponmadronas.htm>
3. <http://students.washington.edu/melliott/arbutus/madroneforest.html>
4. <http://wpsm.net/Arbutus.pdf>
5. <http://www.sannet.gov/street-div/pdf/treeguide.pdf>

Data compiled by (student name and date)

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