Retama monosperma
Bridal veil Broom
Zack Roth
Taxonomy and Morphology

- Genius Retama
- Native to Mediterranean coast
- Legume
- Pioneering species
- Provides protection for successive plants
- It is salt, heat, and both high and low humidity resistant
- Native to coastal sand dunes
- Contains the toxic compound cytisine in the seed
- There are 15 other toxic compounds found throughout the plant
- May be slightly resistant to herbicides
• Generally 3-4.5 meters high at maturity
• Up to 10 meters in diameter
• Leaves are alternate, stipulate, very shortly pedunculated, and small and simple, which are adaptations to dry growing conditions; blades are 4–8 mm in length and 0.7–1 mm in width, lanceolate, oblanceolate, or linear-lanceolate, pubescent on both sides. Leaves fall rapidly following emergence

• Hydraulic lift occurs in this species, such that soil water redistributes passively from deep wet layers via root conduits and flows out of the roots into the drier shallow soil layers
• Inflorescences are axillary, organized in lax racemes with 10–26 flowers
• The species occurs in typically siliceous coastal sand soils and sand dunes, of low organic matter and nutrient content, scarce water, and free drainage
R. monosperma is able to alter the characteristics of the substrate below, leading to increases of 188–466% in soil organic matter and nutrients, compared with the values outside the canopies.

In addition, these significant changes in the chemical properties of poor soils of sand dunes, induced by R. monosperma canopies, were related to important changes in the plant community.

It has been estimated that a lifespan of 55–80 years is possible.
• It loses its leaves shortly after emergence.
• Most of its photosynthesis is carried out by photosynthetic stems.
• This apparently protects the plant from salt spray damage.
• It appears to be able to modify its environment, making growing conditions more suitable for other plants.
• Its structure blocks salt spray from reaching other plants.
• Fixing nitrogen and other nutrients that can later be used by other plants.
• Stabilizes the dune for other species.
• Provides water to other species.
• Protects itself and other plants from herbivory.
• In California it is considered invasive.
• In some native areas it is also considered to be invasive, as it can out compete most other species.
• It is also considered undesirable and is often removed form public areas, mostly due to its toxicity.
• It is used in places as an ornamental plant
• No known breeding efforts
My results

• I started with very few seeds
• One germinated at a time over the course of 3 weeks
• Since then they have all rotted out
• I’m not sure why, it didn’t occur until it was on the cap mat for a week.
Bibliography

