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Hort 5051

Spring 2014

Retama monosperma

Taxonomy

Retama monosperma is a perennial shrub native to the Mediterranean coast of Africa and Europe. It is part of the genus *Retama* and is in the family Fabaceae. It is commonly referred to as bridal veil, bridal veil broom, and bridal veil bush.

Geographic Distribution:

Retama monosperma is native to the Mediterranean coast of Africa and Europe. It is also naturalized in California and Australia. It may also be present in other parts of the world with similar environmental conditions though it is not documented. It is found at sea level and up to 300 feet above sea level.

It is known in California and Australia to be invasive. In some cases in its natural range it is also considered to be invasive. It is not fully understood what causes *Retama monosperma* to flower as examples can be seen in flower at different times of the year.

Native Habitat:

Retama monosperma colonizes sand dunes along Mediterranean coast lines. It modifies these dunes which in turn allows other plant species to colonize after it. Salt resistance is well documented.

Taxonomic Description:

The plant can reach 10 meters wide and 4.5 meters tall. It produces many small leaves that fall off shortly after emergence; this is a defense mechanism that protects the plant from salt spray. It continues photosynthesis and respiration through photosynthetic stems. The root system has not been studied but is known to be capable of hydraulic lift, meaning that it takes up water from deep in the soil and releases it close to the surface. It produces many small showy white flowers on bracts containing 15-35 flowers each. It contains a multitude of different toxic compounds, some of which may have pharmacological applications.

There are currently no cultivars on the market. It is grown from seed, each flower produces one seed. There is no documented seed dormancy and it is not well understood what causes seeds to germinate. One theory is that the seeds have varying thicknesses of seed coats which causes the seeds to germinate at random different intervals over a period of several years.

Product specifications:

Ideally a released cultivar would be less invasive, and have more concentrated flower bracts. It should also have a more consistent and predictable flowering habit. It should also be bred down to a more manageable size.

Market Niche:

Retama monosperma has a very showy flower and a large semi-weeping shrub form. The problems will be controlling flowering and size. It will likely never be hardy anywhere that freezing temperatures occur. As such it may not be practical to produce as an annual for such climates. It could be made available in warmer coastal regions of the world relatively quickly, however in these regions growers may identify the shrubs as a weed and recognize its known invasive status.

Cultural requirements:

It is very well adapted to low soil fertility and moisture. It is tolerant to very high temperatures. It does require well drained soil. It will need to be started in large plugs such as a 72, and then moved to 4" pots, ending up in #1 or larger nursery containers. It is not known to have any major disease or other pest problems.

Production schedule:

Sow seeds in November for spring sales

Transplant into 4" pot after 3 weeks

Grow on to fill 4" pot for about a month

Transplant into a nursery container of desired size (#1 or #2)

Grow out to fill container

Come spring some plants may or may not have leaves and may or may not have flowers.

Bibliography:

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- Prieto, I.; Kikvidze, Z., and Pugnaire, F.I., 2010. Hydraulic lift: soil processes and transpiration in the Mediterranean leguminous shrub *Retama sphaerocarpa* (L.) Boiss. *Plant and Soil*, 329(1–2), 447–456.
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