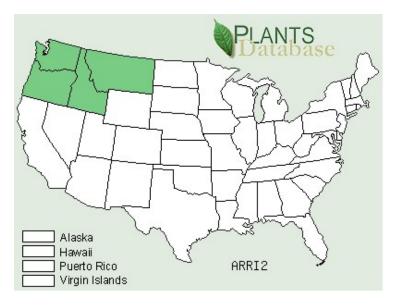


Species (common name, Latin name)

Stiff Sagebrush/Rock Sagebrush/Scabland Sagebrush, Artemisia rigida

Range

Washington, northeastern Oregon, and west-central Idaho, Reports of stiff sagebrush occurring in western Montana are apparently the results of misidentification.



Climate, elevation

A. rigida occurs in more arid climates that usually have severe moisture saturation in the winter and requires that there be at least seventy days that are frost free. It is found anywhere between 700 ft. to 7000 ft.

Local occurrence (where, how common)

A rigida is usually found above 3000 ft. in Washington and is most common in shallow, stony sites mostly in the southern part of the state.

Habitat preferences

A. rigida thrives in harsh, unproductive sites that are shallow and stony and usually are above basaltic bedrock.

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

A. rigida is considered a climax species of the areas it inhabits. It is a late successional species that takes many years to become dominant.

Associated species

1 of 3 2/11/2021, 4:14 PM

Great Basin sagebrush, Wheatgrass-bluegrass, Rocky Mountain juniper, Pinon-juniper

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

Seed, Cuttings from branches and roots.

Collection restrictions or guidelines

Collect by hand and separate seeds using tweezers, seeds can be cleaned by hand using a metal screen. The seeds are mature between September and November. In spring seeds in ground are viable. Seeds are short lived and last less than 5 years in warehouse storage although some subspecies can be stored for longer so the ability to store seeds for an extended time is probable.

Seed germination (needs dormancy breaking?)

No stratification is required but a 5 month outdoor winter stratification of the seeds is recommended for plants growing in colder climates. The seeds are surface sown and need light to germinate. The medium should be kept slightly moist during germination.

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

Seeds can be stored for no more than five years in warehouse conditions

Recommended seed storage conditions

Prior to cleaning seeds can be stored in paper bags in a well ventilated drying shed. After cleaning the seeds they can be stored in a sealed container at 1 C for no longer than 2 years.

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

Seeds should be germinated on slightly moist medium and must be surface sown and exposed to light to root. A stable root system should be established within 4 weeks and the seedlings should be placed in individual pots. From germination to harvest should be about 10 months but this can vary due to growing conditions and the conditions in which the seeds were collected.

Soil or medium requirements (inoculum necessary?)

A. rigida germinates well on commercial soil-less medium such as 50% milled sphagnum pete, perlite, and vermiculite. In its natural state A. rigida grows well in sandy well draining soils like loam and is intolerant to alkaline soils.

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

Seed, container plants grown from seeds, inexpensive pots and medium

Recommended planting density

Sparsely planted, after seedling is larger than 4 in. it should be planted in an individual container.

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

During germination the medium should be kept moist and after good root establishment watering 3 to 4 times a week is necessary if habitat is extremely hot watering should be increased.

Normal rate of growth or spread; lifespan

A. rigida is slow growing and may take up to 3 years to produce viable seeds. Most tridentata lives to be 40 - 60 years old but it can reach ages older than 100 years particularly in "unfavorable sites" where most other plants do not thrive.

Sources cited

- 1. USDA, NRCS. 2004. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- 2. FEIS Plant Database (http://www.fs.fed.us/database/feis/plants/)

2 of 3 2/11/2021, 4:14 PM

3. Washington Native Plant Society (http://www.wnps.org/plant_lists/exploring_native_plants.html)

Data compiled by (student name and date)

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3 of 3