

# RED BUTTE GARDEN

UTAH'S BOTANICAL GARDEN

Garden Plant Collections

## Artemisia



*Artemisia absinthium* 'Lambrook Silver'

*Artemisia*, whose species are more commonly referred to as sagebrush, mugwort, and wormwood, is a diverse assemblage of more than 400 species. They are found on every continent except Antarctica, and in every state in the U.S. Utah is home to 19 native species and 20 subspecies, growing in a wide range of habitats from hot deserts to foothills, rocky slopes, and high elevation mountainsides.

Several growth forms are found in this genus: annuals, perennials that die back to the ground in the winter, and shrubs that can range in size from several inches tall to over eight feet in height. They produce small heads of predominantly wind-pollinated green or yellow flowers and an abundance of pollen. Bees, wasps, and beetles can sometimes be seen harvesting the pollen to eat or feed their larvae. The foliage varies in color from yellow to green to silver-gray. The silver-gray color is due to a covering of tiny hairs that help the plant reflect sunlight and reduce water loss, a great adaptation to arid conditions. Many species also give off an aroma when lightly crushed or gently brushed against. Some produce clean, sharp scents reminiscent of camphor or pine.

*Artemisia* is in the aster family along with other familiar plants such as sunflowers, asters, marigolds, chrysanthemums, and yarrow. Ubiquitous to the American West, the sagebrush steppe community is

dominated by the best-known *Artemisia* species, the iconic big sagebrush (*Artemisia tridentata*).

The genus *Artemisia* is named after Queen Artemisia II of Caria, a Greek botanist and medical researcher from the 3<sup>rd</sup> century BC.

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### DESIGNING WITH ARTEMISIA

Because *Artemisia* contains a wide variety of species and cultivars, there are selections available for a broad range of garden settings and conditions. While many species are waterwise and require well-draining soil and full sun, others thrive in soils with more organic matter and regular watering.

The silver-gray foliage of many *Artemisia* species makes them a colorful companion for ornamental plantings and patio containers. When choosing where to grow *Artemisia*, look for opportunities to highlight their texture, color, form, and scent, and select varieties that are compatible with the cultural conditions they will be planted into. Choose the location for your *Artemisia* carefully, especially the woody species, as mature plants do not transplant well. Caution should be used when planting *Artemisia* in a garden bed where other plants are being grown from seed, as some species of *Artemisia* produce a chemical called artemisinin that inhibits the germination of nearby seeds.



*Artemisia 'Powis Castle'*

Some great varieties worth considering: curlicue sage (*Artemisia versicolor* 'Seafoam'), Oriental Limelight™ wormwood (*Artemisia vulgaris* 'Janlim'), silver mound sage (*Artemisia schmidtiana* 'Silver Mound'), absinth wormwood (*Artemisia absinthium*), black sagebrush (*Artemisia nova*), silver sagebrush (*Artemisia cana*), and tarragon (*Artemisia dracunculus*).

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## CARE AND MAINTENANCE

Most *Artemisia* species thrive in dry conditions. Once established, require little additional care except for an occasional trim for woody species, or yearly cut-back of perennials. Annuals must be replaced each year. *Artemisia* produce many tiny seeds each season, but if re-seeding is not desired, the flowering stalks should be cut off once flowering is complete.

Even though most *Artemisia* species are quite waterwise, like all new plantings, they require regular watering during the first few years until they are fully established.

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## DID YOU KNOW

- The larvae of more than 50 moth species rely on *Artemisia* as food to complete their life cycles. In

Utah, several bucculatricid moth species feed on *Artemisia tridentata*, the spotted sage moth feeds on *Artemisia dracunculus*, and the silver-banded moth feeds on *Artemisia frigida*.

- The culinary herb *Artemisia dracunculus* var. *sativa* (French tarragon) is used in French cuisine and as a flavoring for some Eastern European soft drinks.
- The leaves of *Artemisia absinthium* (grand wormwood) are used in the anise-flavored alcoholic beverage absinthe.
- Several species of *Artemisia* have been used historically as medicine. *Artemisia vulgaris* (mugwort) was used to treat intestinal worms and repel fleas, moths, and midges. The chemical compound artemisinin originally extracted from *Artemisia annua* is now one of the standard compounds used in malaria treatments worldwide.
- The sagebrush steppe community was once a very widespread plant community that has since become degraded and fragmented due to overgrazing, fire suppression, invasive plant species, and human encroachment.
- *Artemisia tridentata* (big sagebrush) provides shelter and is the main food source for sage grouse. Loss of sagebrush habitat, especially areas used during winter, is the primary reason for a decline in sage grouse populations. With reduced habitat, the populations become concentrated making them easier targets for predators.

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## WHERE TO SEE THIS COLLECTION

Members of this collection can be found throughout the Garden. The Natural Area also includes two species of native *Artemisia*, Louisiana wormwood (*Artemisia ludoviciana*) and big sagebrush (*Artemisia tridentata*).



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THE UNIVERSITY OF UTAH