

## Description

Wapiti Germplasm *Elymus elymoides* Raf. Swezey ssp. *brevifolius* was originally collected in Rio Blanco County, Colorado. It is a selected class release of bottlebrush squirreltail which is a native cool-season perennial bunchgrass. The plant grows 8-25 inches tall, and occurs primarily on dry, gravelly or saline soils and is common on hillsides and alkaline flats. The stiff, involute leaf blades expand up to 3/16 of an inch in width and often become smooth or softly pubescent. The spikes of the inflorescence have long divergent awns and are commonly enclosed at the upper part of the sheath. The spikelets are two flowered at each node of a disarticulating rachis with the rachis breaking at the base of each joint. The spikelets drop from the seed head and are disseminated by the wind into surrounding areas.

## Adaptation

Bottlebrush squirreltail is widely distributed, spanning from Mexico to British Columbia and from the west coast to the Dakotas and south to Oklahoma and Texas. It also occupies a wide range of elevations from 4,000 to 10,500 feet and is commonly found on south facing slopes with a wide topographic range from the desert plains to mountain slopes. It inhabits dry, gravelly soils, but is also found on heavier soils such as saline-alkali sites, and is well adapted to harsh

environments and extreme conditions. The soils can be loamy, calcareous, gravelly, shallow, or salty. It thrives on sites that receive 7 to 15 inches of precipitation.



## Uses

The potential uses of Wapiti Germplasm, bottlebrush squirreltail, include erosion control and domestic livestock and wildlife forage production. The plant establishes easily, remains green for a long period and is palatable throughout the winter. Bottlebrush squirreltail is also an important source for fire restoration. It is quick to establish, has a proficient seed dispersal mechanism, and is resistant to fire damage. Bottlebrush squirreltail has also shown that it can become a good competitor with undesirable annual weed species.

## Planting Methods

For best results, Wapiti Germplasm seed should be planted to a depth of ¼ to ½ inch into a firm weed-free seedbed. For pure stands, the recommended drill seeding rate is 7 lb of pure live seed (PLS) per acre. Seed can be planted in early spring, but late dormant fall seeding is recommended for best annual weed suppression. Squirreltail does not establish well into existing perennial shrub communities. Mechanical treatment must be implemented to reduce shrub density before squirreltail is to be established.

## Management

Wapiti Germplasm, bottlebrush squirreltail, was produced from 1989 to 1998 in UCEPC seed production fields and did not demonstrate a cultural concern during production. Because the seed is dispersed quite easily by wind, open, fallow fields may be subject to bottlebrush squirreltail invasion. However, the selection has met the criteria for releasing as per the Environmental Evaluation of NRCS Plant Releases. This release is of a native species that is widely distributed throughout western North America, and of a subspecies that is an important range component in the central Rocky Mountains with recognized benefits to domestic livestock, wildlife and for use in reclamation and revegetation.



### Availability

Upper Colorado Environmental Plant Center (UCEPC) will maintain G1 and G2 seed. G2 seed will be available to growers. Growers may produce one generation (G3) beyond G2 Wapiti Germplasm seed. Any seed used for certified seed production of Wapiti Germplasm must be obtained from UCEPC.



### For More Information

Upper Colorado Environmental Plant Center  
5538 RBC #4  
Meeker, Colorado 81641  
Phone: 970 878-5003  
Fax: 970 878-5004

<http://plant-materials.nrcs.usda.gov/copmc/>

or

Your local USDA Natural Resources  
Conservation Service Office

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## Wapiti Germplasm

### Bottlebrush Squirreltail

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*brevifolius*



Upper Colorado  
Environmental  
Plant Center  
Meeker, Colorado