

**Category C—Low**

**Ripgut brome (*Bromus diandrus*)**

**Identification and Impacts**



Photo credit: J.M. DiTomaso



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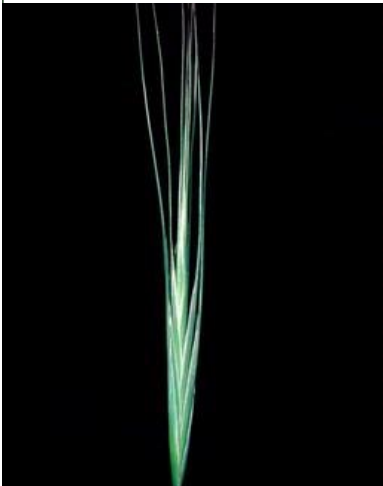


Photo Credit: B. Rice

**Navajo Name**  
T'oh da a gighi

**Origin**  
Native to South America.

**Description**  
Ripgut brome can look very similar to cheatgrass but tends to be taller (2.5 feet tall) with wider leaves (2 to 7 mm wide). Their inflorescence are in an open panicle that is very similar in size to cheatgrass. However, the awns on the seeds are longer (1.5 to 2 inches). The spikelets do become reddish brown to tan as the seeds mature. Leaves and sheath are covered in hairs and it has a distinct ligule that is not fringed and does not have hairs around the margins.



Photo credit: M. Licher

**Biology**  
Ripgut brome is a cool season annual grass that grows in open disturbed sites, rangelands, agricultural fields, roadsides, and many natural communities. They are often in dry sandy soils where there is limited competition with other vegetation. They germinate in the winter and flower in the spring. The seeds generally disperse a short distance from the parent plant but can travel longer distances by wind or by animals and humans. Seed typically survive for 2-3 years, with some evidence of viability after 5 years.

**Locations**  
Currently found east of Chinle near Canyon de Chelly.

**Ecological Threat and Management Concerns**  
Ripgut brome can outcompete native grass species, crowding out perennial grass species especially in rangelands. Accumulated thatch can increase fuels and alter fire regimes. It is also responsive to disturbance, becoming one of the first plants to resprout. It is tolerant of a wide range of environmental conditions, giving it an advantage over slower growing native species. In agricultural settings, ripgut brome can reduce production of cultivated grass species. The seeds can also be carried by animals, humans, and equipment, allowing it to spread to new areas. Ripgut brome is included as one of several non-native annual brome species that have impacted rangelands in the region.

**Key ID Tips**

- Similar growth habit to cheatgrass, but taller in stature.
- Seeds have long awns than other brome species.
- Ligule is not fringed and does not have hairs around the margins.

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Additional safety measures and limitations may apply for each method. Refer to the [Navajo Nation Integrated Weed Management Plan](#) for more information.

**Mechanical/Manual Removal**

Small infestations can be hand pulled or hoed in the early spring before seed maturation. Mowing is not recommended as it can initiate flowering if done before seeds matures. If necessary, repeated mowing should be done every 3 weeks to reduce seed production and followed with herbicide. Shallow tilling in the fall or early spring can also suppress bromes and facilitate perennial grass establishment. Equipment should be cleaned after treatment to prevent seed distribution to new areas.

**Biological**

No biological control organisms are available.

**Cultural Control**

Targeted grazing can be used to control ripgut brome when young and before seed development. However, treatments should be followed with herbicide and should only apply moderate pressure. Burning is feasible and should be done before seeds mature in the late spring. Burning after seed dispersal can increase germination and density.

**Chemical**

Use of herbicides can be effective. Refer to the product labels for information application rates, timing, and approved application methods.

Recommended herbicides include:

- Glyphosate
- Indaziflam
- Metribuzin

**References**

DiTomaso, J.M., G.B. Keyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.

Southwestern Environmental Information Network (SEINET) Arizona-New Mexico Chapter Portal. Available at: <https://swbiodiversity.org/seinet/index.php>.

USDA, NRCS. 2023. PLANTS Database. Available at <https://plants.sc.egov.usda.gov/>. National Plant Data Team, Greensboro, NC 27401-4901 USA.



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