Identification and Impacts

Category C—Low

California burclover (Medicago polymorpha)



Photo credit: G. McDonalo

Navajo Name Tłoh azee

Description

Origin

Native to the Mediterranean region.



Photo credit: K. A. Rawlins

California burclover, despite its name, is a non-native annual legume. It grows from numerous prostrate stems that spread outward 6 to 20 inches. The leaves are clover-like in appearance, are wedge-shaped and toothed at the top. They have smooth surfaces. Plants have only a few small yellow pealike flowers. The fruit is a flattened, coiled pod about 1/4 inch wide with a double row of hooked spines that spiral around the outside of the pod. Individual plants can develop more than 1,000 pods (NRCS 2006)



Photo Credit: J. Viola

Biology

Locations

Burclover germinates in the fall and matures in early summer. It is adapted to mild winters and hot summers. It is well adapted to a wide range of soil conditions, but prefers loamy soils. It can grow in full sun to heavy shade and it is tolerant of alkaline soils (NRCS 2006). It prefers disturbed sites, pastures, roadsides and vacant lots.

It has been detected in Canyon de Chelly in Canyon del Muerto.

Key ID Tips

- Small pea-like flowers
- Small, flatted seed pods with double rows of hooked spikes spiraled on the outside.
- Wedge-shaped leaves with toothed edges at the top.

Ecological Threat and Management Concerns

California burclover was initially used as a cover crop and was sometimes added to livestock feed. However, it can grow fast and displace more preferred native vegetation. It can also affect agricultural sites and can be a contaminant in hay or feed. As a prolific seed producer, burclover should be managed for a few years to ensure populations are controlled.

Category C—Low

California burclover (Medicago polymorpha)

Additional safety measures and limitations may apply for each method. Refer to the <u>Navajo Nation Integrated Weed Management Plan</u> for more information.

Mechanical/Manual Removal

Mowing and cutting can be effective when paired with other control methods. Hand pulling is recommended for small populations and shallow tilling is an effective control method, especially in agricultural fields.

Biological

No biological control organisms are available.

Cultural Control

Targeted grazing is not recommended as disturbance can stimulate germination and resprouting. However, burclover is not harmful to livestock and is used as feed in some instances. Burning is only partially effective and can stimulate resprouting. Monitoring of post-fire conditions is essential.

Chemical

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

Recommended herbicides include:

- 2,4-D
- Glyphosate
- Indaziflam

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.

USDA Natural Resources Conservation Service (NRCS). 2006. Plant Fact Sheet: Burclover. 2 pp. Available online at http://plants.usda.gov.



Bureau of Indian Affairs Navajo Region 301 West Hill Street Gallup, NM 87301 Phone: (505) 863-8314 www.bia.gov/regionaloffices/Navajo-region