

## Spurred anoda

Colorado Dept. of  
Agriculture  
Conservation Services  
Division  
700 Kipling Street  
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Lakewood, CO 80215  
303-239-4100



## Key ID Points

1. Alternate leaves that are 1.5-3" long & arrow-shaped.
2. Light blue to lavender flowers from August through November.

## Spurred anoda Identification and Management



### Identification and Impacts

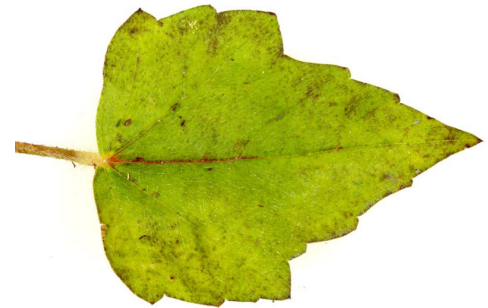
Spurred anoda (*Anoda cristata*) is a summer annual forb with a low growing, spreading profile. The seedlings have one round and one heart-shaped cotyledon with hairs along the margins of the leaves. Each capsule contains 10 to 20 segments each with a brown or black kidney-shaped seed. The leaves are alternate, 1½ to 3 inches long, and triangular to arrow shaped. Mature leaves are coarsely toothed with three distinct lobes. Stems are erect, reaching 3½ feet tall and have branches at the base spreading up to 4 to 5 feet from taproot. The flowers are solitary, arise from the leaf axile, and appear August through November. Flowers are 7 to 12 mm wide with 5 petals that are light blue to lavender in color.

Habitats for Spurred anoda include: ditches, within crops, along roadsides, gardens, waste areas and disturbed sites. Spurred anoda is considered an agricultural weed and is found mainly in agricultural crops (corn, cotton, beans, etc.).

The key to effective control of Spurred anoda is prevent seed production, and establishment of the plant. When Spurred anoda exists in small patches, hand pulling or hoeing may prove to be the best

control method. Make sure to bag plant so spreading of seeds is limited. Herbicide options are available as a control method. Caution should always be used around crops when using herbicides. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Spurred anoda is designated as a "List B" species in the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit [www.colorado.gov/ag/csd](http://www.colorado.gov/ag/csd) and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.



Photos © (Clockwise from lower left): (1 & 2) Virginia Tech Weed Identification Guide; (3) John D. Byrd, Mississippi State University, Bugwood.org; (4) Margaret Rhinehart, TNPS; (5) B. Eugene Wofford; and (6) Tennessee Vascular Plants Atlas.

*Anoda cristata*



**CULTURAL**

Outcompeting Spurred anoda, is difficult with native grasses and forbs, since Spurred anoda likes agricultural crop areas. But, contact your local Natural Resources Conservation Service for seed mix recommendations that may help in rangeland areas. Bareground is prime habitat for weed invasions.



**BIOLOGICAL**

Currently there is no biocontrol option available for Spurred anoda. Biocontrol takes many years of research and development. For more information, contact the Colorado Department of Agriculture's Insectary in Palisade, Colorado at 970-464-7916.



**MECHANICAL**

Hand pulling or digging when soil is moist, making sure to get the roots to prevent resprouting. Removing flowers before the plant sets seed will also be effective. Be sure to bag specimens carefully as not to spread seeds.

*Integrated Weed Management:*

*Locate and remove plants immediately before plants set seed to prevent the spread of Spurred anoda. Since the plant reproduces solely by seed, integrated management efforts must include the elimination of seed production and depletion of seed bank. Combing control methods of herbicide and mechanical can be effective.*

Spurred anoda

**HERBICIDES**

**NOTE:** The following are recommendations for herbicides that can be applied to range and pasturelands. *Rates are approximate and based on equipment with an output of 30 gallons per acre. Always read, understand, and follow the label directions. The herbicide label is the LAW!*

HERBICIDE	RATE	APPLICATION TIMING