

# Black nightshade

## *Solanum nigrum* L.



Dirk V. Baker, Tara L. Steinke, Sandra K. McDonald 1/04



**Other common names:** garden nightshade, common nightshade

**Family:** *Solanaceae* (Nightshade)

**USDA Code:** SONI

**Bayer Code (WSSA):** SOLNI

**Life cycle classification:** Annual or short-lived perennial forb

**Legal Status:** Colorado Noxious Weed

**Native to:** South America

**Entry into Colorado:** Probably introduced as a garden ornamental

**Current distribution in Colorado:** Reported from both east and west slope counties in Colorado (CNAP 2000)



### Biology

**Seasonal development:** Black nightshade seedlings emerge throughout spring and most of the summer and grow rapidly, allowing competition with many crops (Basset and Munro 1985 cited in CNAP 2000). It has been reported to become troublesome in fields where certain herbicides have been used to control other weeds but are weak on black nightshade (Whitson et al. 2000).

### Reproduction

Most commonly reproduces by: Seed

**Numbers of seeds/plant:** Black nightshade is capable of producing 2,500-5,000 seeds per plant (Basset and Munro 1985).

### Description

**Roots:** Taproot

**Stems:** Mature plants range in size from 6 inches to 2 feet tall. Stems and leaves have a smooth appearance (CNAP 2000).

**Leaves:** Leaves are alternate, ovate, wavy-edged, and tapered (CNAP 2000).

**Flowers:** Flowers are white to pale blue, small (0.25-0.5 inches wide), and are borne in clusters (CNAP 2000).

**Fruits & seeds:** The fruits of black nightshade are round, green when immature but turn black upon maturity (Basset and Munro 1985).

### Value & Uses

**Wood products:** No information available

#### Importance to/impact on livestock & wildlife:

**Palatability:** Black nightshade berries have been reported to be poisonous to cattle, sheep, goats, pigs, ducks and chickens (Basset and Munro 1985).

**Nutritional value:** Poisonous

**Cover value:** No information available

**Value for rehabilitation of disturbed sites:** No information available

**Other uses & values:** Ornamental

#### Infestations

**Habitat:** Black nightshade is found on a variety of soils and climates from sandy/gravelly soils to fertile cultivated soils. Black nightshade seems to prefer soils that are high in nitrogen and may be found on disturbed soils such as roadsides, rights-of-way, overgrazed rangeland, flowerbeds vegetable gardens, and cultivated fields, particularly spring-seeded crops (CNAP 2000).

#### Impacts/Threats

**Special Challenges to Management:** The berries of black nightshade plants frequently become mixed with harvested commodities, decreasing crop quality. The plants also cause problems in harvest operations by forming a sticky mass that can quickly plug combine screens and rotors (Basset and Munro 1985). Black nightshade berries have been reported to be poisonous to cattle, sheep, goats, pigs, ducks and chickens (Basset and Munro 1985).

#### Control Methods

##### Physical

**Manual:** Small infestations may be hand pulled or hoed to prevent seed production (Basset and Munro 1985). However, such practices should be repeated throughout the growing season.

##### Mechanical

**Cultivation:** Tillage can also be a useful tool to prevent or reduce seed production where it is an option (Basset and Munro 1985)

**Mowing:** Repeated mowing throughout the summer is also a viable option to reduce seed production (Basset and Munro 1985).

**Cultural:** As with other plants which reproduce solely by seed, integrated management efforts must include the elimination of seed production and the depletion of the seed bank. Use mechanical or chemical methods to prevent seed production, and revise land management practices to ensure the maintenance of desirable plant cover (CNAP 2000).

##### Biological:

**Insects:** None known

**Pathogens:** None known

## Chemical

Conventional:

Trade Name (common name)	Product/Acre (Active ingredient/Acre)	Remarks
Rave (triasulfuron + dicamba)	3 to 4 oz	Apply when plants are 1 to 4 inches tall
Many Trade Names (glyphosate)	1.5 lb (1.5 qt)	
Vanquish/Clarity (dicamba)	0.75 to 1.0 lb (1.5 to 2 pt)	

Organic: No information available

**USE PESTICIDES WISELY:** Always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing.

**NOTICE:** Mention of pesticide products in this profile does not constitute endorsement of any material.

### Links:

Colorado Dept. of Agriculture, Division of Plant Industry

<http://www.ag.state.co.us/DPI/weeds/Weed.html>

Colorado Weed Management Association

<http://www.cwma.org>

Colorado Weed Management Guide

[http://www.cepep.colostate.edu/WeedGuide/Weed\\_Guide\\_2004.pdf](http://www.cepep.colostate.edu/WeedGuide/Weed_Guide_2004.pdf)

### References:

Basset, I.J., and D.B. Munro. 1985. The biology of Canadian weeds. 67. *Solanum ptycanthum* Dun., *S. nigrum* L. and *S. sarrachoides* Sendt. Canadian Journal of Plant Science 65:401-414.

Beck, K.G., S.K. McDonald, S.J. Nissen, P.H. Westra. 2002. Colorado Weed Management Guide. Colorado State University Cooperative Extension. Fort Collins, CO. XCM-205.

Colorado Natural Areas Program. 2000. Creating an Integrated Weed Management Plan: A Handbook for Owners and Managers of Lands with Natural Values. Colorado Natural Areas Program, Colorado State Parks, Colorado Department of Natural Resources; and Division of Plant Industry, Colorado Department of Agriculture. Denver, CO. pp 261-262.

[http://parks.state.co.us/cnap/IWM\\_handbook/IWM\\_index.htm](http://parks.state.co.us/cnap/IWM_handbook/IWM_index.htm)

Stubbendieck, J., G.Y. Friisoe, M.R. Bolick. 1995. Weeds of Nebraska and the Great Plains. Nebraska Department of Agriculture. Lincoln, NE. pp 526-527.

USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Whitson, T.D.(ed.), L.C. Burrill, S.A. Dewey, D.W. Cudney, B.E. Nelson, R.D. Lee, R. Parker. 2000. Black nightshade. *Weeds of the West*. Western Society of Weed Science, in cooperation with the Western United States Land Grant Universities Cooperative Extension Services and the University of Wyoming. pp. 568-569.

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