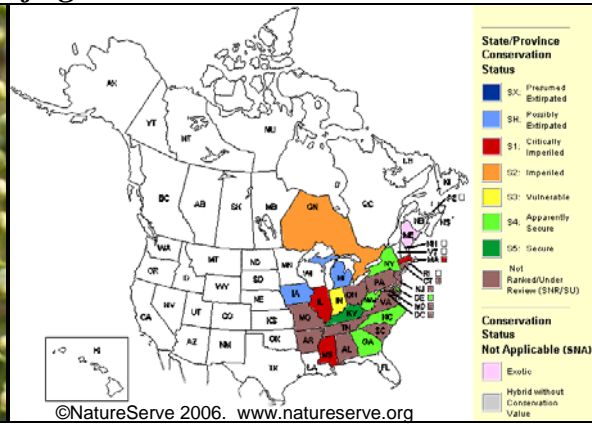


Medicinal Plant Fact Sheet: *Cimicifuga racemosa* / Black Cohosh



Common Name

Black cohosh, black bugbane, rattle-snakeroot, papoose root, fairy candles

Scientific Name

Cimicifuga racemosa (L.) Nutt. (Ranunculaceae or Buttercup family)

Description

Black cohosh is an erect perennial that emerges from a large knotty mass of underground stems (Predny *et al.* 2006). The above ground plant grows from 1-2.6 meters high (40-100 inches; Fernald 1987). The large-toothed leaves are divided into 2-5 leaflets that are arranged in groups of three and end in a three-lobed leaflet (Foster 1999; Predny *et al.* 2006). It flowers from June to September. Flowers, buds and seedpods are simultaneously borne on a tall arching stalk from 30-90 cm. tall (10-35 inches; Predny *et al.* 2006). The flowers are 2.5 cm (1 inch) wide and have subtle petals and showy tufts of greenish white stamens creating a fairy-wand appearance (Foster 1999; Predny *et al.* 2006).

Black cohosh can be confused with other plants in the *Cimicifuga* genus, particularly yellow cohosh, (*Cimicifuga americana*) or baneberry (*Actaea pachypoda* and *A. rubra*; NatureServe 2007; Predny *et al.* 2006).

Distribution

Black cohosh grows in rich soils on wooded hillsides of the Appalachian Mountains (Foster 1999; Wood 2000). It ranges from Southern Ontario to Wisconsin and south to South Carolina, Georgia, Tennessee, Arkansas and Missouri (Lockard and Swanson 1998) and is considered to be relatively more abundant in the southern portion of its range (Lyke 2001).

Reproduction

Black cohosh reproduces by seed and also spreads by underground stems. Black cohosh seeds ripen in the mid-summer and require a warm period (hot late summer and fall) followed by a cold period (winter) to germinate (Wood 2000).

Pollinators and Dispersal: Black cohosh flowers have a fetid odor that is highly attractive to many insect visitors and pollinators. Its flowers produce abundant nectar and pollen. Black cohosh is a major food source for the caterpillars of the Appalachian Azure butterfly (*Celastrina neglectamajor*; GNSI 2007). Three species of bumblebees have been observed visiting the blossoms of *C. racemosa* in Arizona (Pellmyr 1985).

Medicinal Uses

Native Americans used black cohosh as a treatment for various female conditions, rheumatism as well as other ailments (Moerman 1988). European settlers learned the medicinal uses from Native American and brought it back to Europe in the 18th and 19th centuries. Early settlers used it to treat small pox (Predny *et al.* 2006; Wood 2000). Black cohosh root was listed in the U.S. Pharmacopeia as an official drug from 1820-1926 (Foster 2000) and has been used as a standardized phytomedicine in Europe since the 50's. Today, black cohosh root is used primarily to treat symptoms of menopause.

Trade

The resurgence in popularity of natural remedies in the United States combined with evidence that the risks of synthetic hormone replacement therapy outweigh the benefits for healthy women "opened" a new market for supplements based on black cohosh (Roussouw *et al.* 2002). In 2001, the market for black cohosh grew 106% (Blumenthal 2002). In 2005,

black cohosh ranked as the eighth top selling herb in the United States with a reported value of \$9.7 million (Blumenthal *et al.* 2006). This is likely an underestimate of the actual market.

Black cohosh wild harvest can only be estimated, as the species is not monitored throughout its range (Predny *et al.* 2006). The American Herbal Products Association has conducted three tonnage surveys that give a conservative estimate of harvest. Companies that participated in the survey collectively reported selling about 160 tons of dry root and 990 pounds fresh roots, of which, more than 98 percent was collected from the wild (AHPA 2000, 2003, 2007) rather than cultivated.

Legal Protection and Conservation Status

The major threat to black cohosh populations is habitat destruction. In portions of its range, black cohosh may also be threatened from over-harvest for the herbal products trade. Of the 24 U.S. range states, the threat status for black cohosh has not been determined in 12 states. Black cohosh is presumed extirpated in 2 states, is listed as endangered in Illinois and Massachusetts, and is on the watch list in Indiana (NatureServe 2007; USDA-NRCS 2007). Black cohosh is listed as "At Risk" by United Plant Savers.

Black cohosh was considered for Appendix II and later for Appendix III listing on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES; Lyke 2001). As of March 2006, the U.S. FWS withdrew active consideration to list the species, but continues to monitor its status (De Angelis 2007).

Several closely related plants resemble black cohosh and may be harvested intentionally to add bulk or unintentionally due to misidentification (NatureServe 2007; Predny *et al.* 2006).

Sustainable Use and Conservation

Black cohosh is a slow-growing perennial with global demand. Because this species is primarily wild harvested and the harvest results in mortality of the plant, wild black cohosh populations may be susceptible to over-harvest. There are ongoing efforts to research harvest impacts on black cohosh and provide information to help collectors and resource managers make conservation decisions (Ford 2000; Kauffman 2002; Schlosser 2002). Wild populations must be monitored and greater emphasis must be given to cultivation. The following good stewardship practices can help to maintain or enhance wild black cohosh populations.

Sustainable Actions

- 🌿 **Wild-harvesters:** Find out the legal requirements for wild-harvesting black cohosh in your state; rotate harvest areas; thin patches rather than collecting all available plants; leave a portion of mature and juvenile individuals untouched; replant parts of harvested roots.
- 🌿 **Growers:** Find out the legal requirements for cultivating in your state; ensure planting stock is obtained in a way that does not threaten wild populations; consult local experts and resources for cultivation requirements in your area.
- 🌿 **Practitioners and Consumers:** Choose sustainable-wildcrafted or verifiably cultivated sources of black cohosh bulk herbs or supplements; use black cohosh only when it is best indicated; when choosing substitutes, exercise caution not to choose a species that is equally vulnerable to over-harvest.

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More Information

For more information on Black Cohosh, including a list of references, go to http://www.plantconservationwiki.org/wiki/Cimicifuga_racemosa.



<http://www.iucn.org/themes/ssc/sgs/mpsg>



<http://www.nappc.org>



<http://www.nps.gov/plants/medicinal>

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