

The Longwood Herbal Task Force
(<http://www.mcp.edu/herbal/default.htm>) and
The Center for Holistic Pediatric Education and Research
Clinician Information Summary

BURDOCK

(*Arctium lappa*)

SUMMARY

Burdock has been used in numerous countries throughout history to treat problems ranging from arthritis and baldness to cancer. It is one of the key herbal ingredients in the 20th century cancer remedies, Essiac and the Hoxsey formula, and is also under investigation as an anti-HIV agent. There is little clinical evidence evaluating these uses. Burdock appears safe (it is eaten as a vegetable in Japan), except for occasional contact dermatitis and the risk of misidentification with toxic herbs such as belladonna. Animal studies suggest caution in using burdock in diabetic patients. It is not traditionally used during pregnancy, lactation or early childhood; insufficient data exist to make recommendations for use during these periods or with other herbs or medications.

POPULAR USES Burdock is used to treat a variety of conditions including baldness, eczema, seborrhea, canker sores, arthritis, urinary tract infections, respiratory infections, HIV disease and cancer. Burdock is consumed as a vegetable in Japan and is available in specialty groceries in the U.S. It is part of two herbal cancer remedies: Essiac and the Hoxsey formula.

CHEMICAL CONSTITUENTS

- Polyacetylenes
- Lignans and dilignans: arctigenin
- Carbohydrates (up to 50% inulin), phytosterols, polysaccharides, organic acids

(continued)

SCIENTIFIC DATA

In Vitro: Lignans found in burdock and other plants antagonize platelet activating factor (PAF), exhibit activity against HIV1 and some gram negative bacteria, and are cytostatic toward certain cancer cell lines. Fresh burdock juice inhibits mutagenicity *in vitro*.

In Animals: Burdock aggravated hyperglycemia in diabetic mice, but lowered blood sugar levels in normal mice.

In Humans: No controlled trials have been reported.

TOXICITY AND SIDE EFFECTS

Allergic reactions have been reported, but are uncommon. Misidentification has led to unintentional poisoning with belladonna.

Interactions with other medications: Unknown

Contraindications: Based on animal data, caution is advised in using in diabetic patients.

Pregnancy: Due to its traditional uses as a uterine stimulant, it is not used during pregnancy.

Lactation: No clinical studies

Pediatric use: Burdock is not traditionally used in infancy or early childhood. There are no clinical studies or systematic surveillance.

ADDITIONAL REFERENCES OR RESOURCES

- *PDR for Herbal Medicine*, 1st Ed., Medical Economics Company, 1998
- Locock RA. Burdock. *Canadian Pharmaceutical Journal*, 1997;130(Jun): 46-49
- HOME: <http://www.mcp.edu/herbal/default.htm>