

HOME PATIENT CARE EDUCATION RESEARCH COMMUNITY

Health Information Library

Library Home

Find A Physician

Find A Practice

Request An Appointment

Search Clinical Studies

Classes and Support Groups

Ask A Health Librarian

Subscribe to eNewsletters

Devil's claw

Also listed as:

- Overview
- Plant Description
- Medicinal Uses and Indications
- What is it Made of?
- Available Forms
- How to Take it
- Precautions
- Possible InteractionsSupporting Research



Health Information Centers

Bone and Joint

Cancer

Children

<u>Heart</u>

Men

Neurology

Pregnancy

Seniors

<u>Women</u>







Overview

Native to southern Africa, devil's claw (*Harpagophytum procumbens*) gets its name from the tiny hooks that cover its fruit. Historically, devil's claw has been used to treat pain, liver and kidney problems, fever, and malaria. It has also been used in ointments to heal sores, boils, and other skin problems.

Devil's claw was introduced to Europe in the early 1900s, where the dried roots have been used to restore appetite, relieve heartburn, and reduce pain and inflammation.

Today, devil's claw is used widely in Germany and France to fight inflammation or relieve arthritis pain, headache, and low back pain. Animal and test tube studies suggest that devil's claw can help fight inflammation.

Plant Description

Devil's claw does not have an odor, but it contains substances that make it taste bitter. It is a leafy perennial with branching roots and shoots. It has secondary roots, called tubers, that grow out of the main roots. The roots and tubers are used as medicine.

Medicinal Uses and Indications

Osteoarthritis

Several studies show that taking devil's claw for 8 to 12 weeks can reduce pain and improve physical functioning in people with osteoarthritis. One 4-month study of 122 people with knee and hip osteoarthritis compared devil's claw and a leading European medication for pain relief. The people who took devil's claw had as much pain relief as the people who took the medication. Those who took devil's claw had fewer side effects and needed fewer pain relievers throughout the study.

An analysis of 14 studies using devil's claw to treat arthritis found that higher quality studies showed devil's claw may relieve joint pain. And a review of 12 studies using devil's claw for treating arthritis or low back pain found that devil's claw was at least moderately effective for arthritis of the spine, hip, and knee.

Back and neck pain

Preliminary evidence suggests that devil's claw may help relieve neck and low back pain. In a small study of 63 people with mild-to-moderate back, neck, or shoulder pain, taking a standardized extract of devil's claw for 4 weeks provided moderate relief from muscle pain. In a larger study of 197 men and women with chronic low back pain, those who took devil's claw every day for a month said they had less pain and needed fewer painkillers than those who took placebo.

A 54-week study compared 38 people who took devil's claw with 35 people who took the pain reliever rofecoxib (Vioxx). For these people, devil's claw worked as well as Vioxx to relieve pain. The Food and Drug Administration (FDA) took Vioxx off the market because it increases the risk of heart problems.

Other uses

Many professional herbalists suggest that devil's claw can help treat upset stomach, loss of appetite, headaches, allergies, and fever. Topical preparations of devil's claw are also applied to the skin to heal sores, ulcers, boils, and skin lesions. However, there are not any definitive scientific studies that show using devil's claw to treat these conditions is effective.

What is it Made of?

Devil's claw contains iridoid glycosides, components believed to have strong anti-inflammatory effects. It has a high concentration of one type of iridoid, called harpagoside, and some laboratory tests suggest it may relieve pain and inflammation.

Available Forms

Dried or fresh root of devil's claw can be found in capsules, tablets, liquid extracts, and topical ointments. Teas (infusions) can also be made from dried devil's claw root.

How to Take it

Pediatric

Devil's claw is not recommended for children, since studies have not been done to see if it is safe.

Adult

Ask your doctor to help you find the right dose.

Precautions

The use of herbs is a time-honored approach for strengthening the body and treating disease. However, herbs can have side effects and interact with other herbs, supplements, or medications. For these reasons, you should take herbs under the supervision of a health care provider qualified in the field of botanical medicine.

If taken at the recommended dose for a short time, health practitioners consider devil's claw non-toxic and safe, with few side effects. High doses can cause mild stomach problems in some people. Researchers do not know if it would be safe to take devil's claw for a long time.

People with stomach ulcers, duodenal ulcers, or gallstones should not take devil's claw. Studies show taking devil's claw may vause gastrointestinal side effects.

Pregnant and breastfeeding women should not take devil's claw since studies in these populations are lacking.

People with heart disease, high blood pressure, or low blood pressure should ask their doctors before taking devil's claw.

Possible Interactions

Blood-thinning medications (anticoagulants and antiplatelets): In theory, devil's claw may increase the risk of bleeding, especially if you already take blood thinners such as aspirin, warfarin (Coumadin), or clopidogrel (Plavix).

Medications for diabetes: Devil's claw may lower blood sugar. If you take medications to treat diabetes, taking devil's claw may raise the risk of developing low blood sugar.

Antacids: Devil's claw may increase the amount of stomach acid, making antacids less effective.

Other medications: Devil's claw may interact with other medications that are broken down by the liver. If you take any medications, ask your doctor before taking devil's claw.

Supporting Research

Abdelouahab N, Heard C. Effect of the major glycosides of Harpagophytum procumbens (Devil's Claw) on epidermal cyclooxygenase-2 (COX-2) in vitro. *J Nat Prod.* 2008 May;71(5):746-9.

Baghdikian B, Lanhers M, Fleurentin J, et al. An analytical study, anti-inflammatory and analgesic effects of Harpagophytum procumbens and Harpagophytum zeyheri. *Planta Med.* 1997;63:171-176.

Brendler T, Gruenwald J, Ulbricht C, Basch E; Natural Standard Research Collaboration. Devil's Claw (Harpagophytum procumbens DC): an evidence-based systematic review by the Natural Standard Research Collaboration. *J Herb Pharmacother*. 2006;6(1):89-126.

Brien S, Lewith GT, McGregor G. Devil's Claw (Harpagophytum procumbens) as a Treatment for Osteoarthritis: A Review of Efficacy and Safety. *J Altern Complement Med*. 2006;12(10):981-93.

Cameron M, Gagnier JJ, Little CV, Parsons TJ, Blümle A, Chrubasik S. Evidence of effectiveness of herbal medicinal products in the treatment of arthritis. Part I: Osteoarthritis. *Phytother Res.* 2009 Nov;23(11):1497-515. Review.

Chantre P, Cappelaere A, Leblan D, Guedon D, Vandermander J, Fournie B. Efficacy and tolerance of Harpagophytum procumbens versus diacerhein in treatment of osteoarthritis. *Phytomedicine*. 2000;7(3):177-83.

Chrubasik S, Junck H, Breitschwerdt H, Conradt C, Zappe H. Effectiveness of Harpagophytum extract WS 1531 in the treatment of exacerbation of low back pain: a randomized, placebo-controlled, double-blind study. *Eur J Anaesthesiol*. 1999;16(2):118-129.

Chrubasik S, Sporer F, Dillmann-Marschner R, Friedmann A, Wink M. Physiochemical properties of harpagoside and its in vitro release from Harpagophytum procumbens extract tablets. *Phytomedicine*. 2000;6(6):469-473.

Chrubasik S, Pollak S, Black A. Effectiveness of devil's claw for osteoarthritis. Rheumatology (Oxford). 2002;41(11):1332-3.

 $Chrubasik \ S. \ [Devil's \ claw \ extract \ as \ an \ example \ of the \ effectiveness \ of \ herbal \ analgesics]. \ Orthopade. \ 2004; 33(7):804-8.$

Conrozier T, Mathieu P, Bonjean M, Marc JF, Renevier JL, Balblanc JC. A complex of three natural anti-inflammatory agents provides relief of osteoarthritis pain. Altern Ther Health Med. 2014;20 Suppl 1:32-7.

Denner SS. A review of the efficacy and safety of devil's claw for pain associated with degenerative musculoskeletal diseases. rheumatoid, and osteoarthritis. Holist Nurs Pract. 2007;21(4):203-7.

Ernst E, Chrubasik S. Phyto anti-inflammatories. A systematic review of randomized, placebo-controlled, double-blind trials. Rheum Dis Clin North Am. 2000:26(1):13-27.

Gagnier JJ, van Tulder MW, Berman B, Bombardier C. Herbal medicine for low back pain: a Cochrane review. Spine. 2007;32(1):82-

Gobel H, Heinze A, Ingwersen M, Niederberger U, Gerber D. Effects of Harpagophytum procumbens LI 174 (devil's claw) on sensory, motor und vascular muscle reagibility in the treatment of unspecific back pain. [German] Schmerz. 2001;15(1):10-18.

Grant L, McBean DE, Fyfe L, Warnock AM. A review of the biological and potential therapeutic actions of Harpagophytum procumbens. Phytother Res. 2007;21(3):199-209.

Gregory P, Sperry M, Friedman Wilson A. Dietary supplements for osteoarthritis. Am Fam Phys. 2008;77(2):177-84.

Heck AM, DeWitt BA, Lukes AL. Potential interactions between alternative therapies and warfarin. Am J Health Syst Pharm. 2000;57(13):1221-7.

Hostanska K, Melzer J, Rostock M, Suter A, Saller R. Alteration of anti-inflammatory activity of Harpagophytum procumbens (devil's claw) extract after external metabolic activation with S9 mix. J Pharm Pharmacol, 2014;66(11):1606-14.

Izzo AA, Di Carlo G, Borrelli F, Ernst E. Cardiovascular pharmacotherapy and herbal medicines: the risk of drug interaction. Int J Cardiol. 2005:98(1):1-14.

Lanhers MC, Fleurentin J, Mortier F, Vinche A, Younos C. Anti-inflammatory and analgesic effects of an aqueous extract of Harpagophytum procumbens, Planta Med. 1992;58:117-123.

Laudahn D, Walper A. Efficacy and tolerance of Harpagophytum extract LI 174 in patients with chronic non-radicular back pain. Phytother Res. 2001;15(7):621-4.

Leblan D, Chantre P, Fournie B. Harpagophytum procumbens in the treatment of knee and hip osteoarthritis. Four-month results of a prospective, multicenter, double-blind trial versus diacerhein. Joint Bone Spine. 2000;67(5):462-467.

Na HK, Mossanda KS, Lee JY, Surh YJ. Inhibition of phorbol ester-induced COX-2 expression by some edible African plants. Biofactors. 2004;21(1-4):149-53.

Soulimani R, Younos C, Mortier F, et al. The role of stomach digestion on the pharmacological activity of plant extracts, using as an example extracts of Harpagophytum procumbens. Can J Physiol Pharmacol. 1994;72(12):1532-1536.

Wegener T, Lupke NP. Treatment of patients with arthrosis of hip or knee with an aqueous extract of devil's claw (Harpagophytum procumbens DC.). Phytother Res. 2003;17(10):1165-72.

Wegener T. [Degenerative diseases of the musculoskeletal system--overview of current clinical studies of Devil's Claw (Harpagophyti radix)]. Wien Med Wochenschr. 2002:152(15-16):389-92.

Whitehouse L, Znamirowski M, Paul CJ. Devil's Claw (Harpagophytum procumbens): no evidence for anti-inflammatory activity in the treatment of arthritic disease. Can Med Assoc J. 1983:129:249-251.

Review Date: 6/22/2015

Reviewed By: Steven D. Ehrlich, NMD, Solutions Acupuncture, a private practice specializing in complementary and alternative medicine, Phoenix, AZ. Review provided by VeriMed Healthcare Network.



A.D.A.M., Inc. is accredited by URAC, also known as the American Accreditation HealthCare Commission (www.urac.org). URAC's accreditation program is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s editorial policy, editorial process and privacy policy. A.D.A.M. is also a founding member of Hi-Ethics and subscribes to the principles of the Health on the Net Foundation (www.hon.ch).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only — they do not constitute endorsements of those other sites. © 1997-2015 A.D.A.M., Inc. Any duplication or distribution of the information contained herein is strictly prohibited.







