



DEVIL'S CLAW

Common Names: Grapple plant, wood spider

Scientific Names: Harpagophytum procumbens

Effectiveness: Devil's Claw may moderately reduce pain in patients with osteoarthritis. There is no data to support its use in rheumatoid arthritis.

Safety: Devil's Claw may moderately reduce pain in patients with osteoarthritis. There is no data to support its use in rheumatoid arthritis.

What is Devil's Claw?

- Devil's claw is a herb native to Africa. It is also called "hook plant" due to the appearance of its fruit.
- The roots and tubers of the plant are used to make medicine.

What it is it used for in people with rheumatic conditions?

- Devil's Claw has been used for the management of osteoarthritis (OA), rheumatoid arthritis (RA), and gout.

How is it thought to work?

- A chemical found in the root (iridoid glycosides: harpagoside, harpagide, procumbide) has been shown to reduce inflammation.
- These chemicals stop certain pathways and enzymes (COX-2) from increasing inflammation.



Does it Work? What the Science Says:

Devil's Claw
(aqueous extract)
410mg 3x/day

- Single centre, open label pilot study (N=13) over 6 weeks of patients with active rheumatoid or psoriatic arthritis on NSAID, steroid, or DMARD (penicillamine (n=1) or chloroquine (n=1)) therapy. No clinically important improvement was noted in pain, stiffness, or ESR.
- Small pilot study did not demonstrate benefit in inflammatory arthritis.

Harpadol®
Devil's Claw 2,610
mg/day
(57mg
harpagosides)

- A multicenter, randomized, double-blind, double-dummy, parallel-group study of 122 patients with hip/knee osteoarthritis (pain VAS ³⁵ and Lequesne index ³⁴ (a score for severity of OA)) was performed over a 4 month time period. Devil's Claw 2,610mg was compared to diacerein 100mg/day (an anthraquinone that interferes with IL-1; used to reduce pain in OA, but not available in Canada). Both groups demonstrated improvement in OA symptoms, with no significant difference in pain (-30mm vs -25mm), functional disability or Lequesne's index between groups. Patients using Devil's claw used significantly less rescue acetaminophen and NSAID.
- Small, but well conducted trial demonstrated that Devil's claw was at least as effective as diacerein for pain control in patients with OA, with a reduction in NSAID use.

Doloteffin®
Devil's Claw
2,400 mg/day
(60mg
harpagoside)

- A post-marketing surveillance study of 104 patients with nonspecific low back pain, 85 with OA in the knee, 61 with OA in the hip were followed up for 8 weeks. It used 3 established instruments to measure Devil's Claw's effect on pain and disability. Patients with hip/knee OA experienced a clinically important (16-40%) reduction in knee or hip pain using the WOMAC pain subscale, with those with higher initial pain benefiting more; 10% had minor GI adverse effects.
- Small, short duration surveillance study showed Devil's Claw could improve OA pain and disability symptoms.

- There are several studies that suggest that Devil's Claw is safe and may benefit patients by decreasing osteoarthritis pain in the short-term. However, these studies are small and/or are limited in the way they were conducted.
- Large, well-conducted trials are needed to determine the long-term effectiveness and safety of this natural health product.
- If used, the harpagoside content should be no less than 1% or 50-60mg.

What are possible side effects and what can I do about them?

- Devil's Claw is generally well tolerated orally when used short term (less than 3-6 months). The most common side effect is diarrhea. Other stomach issues, such as nausea, vomiting, gas, and abdominal pain have been reported.
- Other possible side effects include headache, ringing in the ears, and loss of appetite or taste (reported by 1 patient).

Interactions

With drugs:

- Devil's Claw may interact with warfarin. This could increase the risk of bleeding. Purple/red discoloration of the skin (purpura) was seen in a patient taking these two drugs together. Devil's claw should be avoided or used with increase monitoring of warfarin. Devil's Claw does not seem to interact with other drugs that affect how the blood clots.
- Devil's Claw may inhibit liver enzymes that break down other medications (CYP 2C19, 2C9, 3A4- moderate interaction). This may increase the side effects of those drugs. Consult your pharmacist before using Devil's Claw.

With Other Diseases:

- May affect how fast or strong the heart beats and blood pressure. It should be used with caution in people with heart related conditions and high or low blood pressure.
- May lower blood sugar levels. People with diabetes should monitor their sugars closely.
- May increase the acid in the stomach. Should be used with caution in those with a history of stomach ulcers.
- May increase bile production. Should be avoided in people with gallstones.
- Likely unsafe in pregnancy due to potential to cause contractions of the uterus (oxytocic effects). Avoid use in pregnancy.

For more information about Devil's Claw, consult your physician and pharmacist.