

ARPADOLCLINIC - A New Solution for Pain and Inflammation

Ecotrend is pleased to introduce **ARPADOL®**-a new remedy in the ongoing battle against pain and inflammation.

ARPADOL® contains Devil's Claw (*Harpagophytum procumbens*), in both full-spectrum extract form, as well as standardized *harpagoside*, its main active constituent, and each tablet is coated with a natural cellulose polymer to render the tablet gastro-resistant.

Devil's Claw is a desert plant which is indigenous to Southern and Eastern Africa, and is found in abundance in the Kalahari desert and the Namibian steppes. It has been traditionally utilized in the treatment of a variety of illnesses including arthritis, fever, skin lesions, gout, and afflictions of the liver, kidney and gallbladder. It was introduced to Europe via Germany, where attention has focused on its use as an anti-inflammatory and anti-rheumatic herb.

The therapeutic part of the plant is the tuberous root, which contain a rich and diverse mix of chemical constituents, including: iridoid glycosides (of which harpagoside is but one), flavonoids, phenolic acids, quinines, phytosterols, and triterpenes.



For more than half a century, various preparations have been used in Europe, to v a r y i n g

degrees of effectiveness. Two main reasons cited in the literature for a lack of success in treatment with Devils' Claw were either: de-activation of the active constituents in the presence of gastric juices¹, or a lack of standardization in the preparation used.

In the case of the former, further studies did indeed confirm that as long as the preparation is able to avoid those secretions, it is an effective analgesic, anti-inflammatory and anti-rheumatic.²



In the case of the latter, it was found that the administration of isolated harpagoside alone was not an effective anti-inflammatory, and that while isolated harpagoside did demonstrate some analgesic activity, this effect was less than 42% of the activity of the whole plant extract at double dosage, indicating other compounds in the plant are involved.³ It can therefore be seen that any effective treatment with Devil's Claw will be optimized by combining both a full-spectrum extract and a sufficient amount of standardized harpagoside.

Notably, in the past few years, a significant body of evidence has been collected showing that certain preparations of Devil's Claw, containing a daily dose of more than 50mg harpagoside, is useful in the treatment of osteoarthritis of the hip, knee and spine,⁴ and that a 100mg extract of *Harpagophytum* is useful for treatment of non-specific low back pain.⁵

In-vitro data demonstrated that the active principle of Devil's Claw inhibits not only inflammatory mediators such as COX-2 mediated prostaglandins, or leukotriene release, but also mediators of cartilage destruction such as TNF- α , interleukin-1 β , matrix metalloproteinases, nitric oxide, and elastase.^{6,7,8,9}

Another study proved that Devil's Claw was as effective as NSAIDs in the treatment of arthritis and other inflammatory joint diseases, which is very favourable in light of the known deleterious effects of long-term use of the pharmaceuticals.¹⁰

Therefore, considering Devil's Claw long history of use in Africa, the positive results from a growing body of scientific studies, and the absence of the harmful side effects encountered when using NSAIDs, it is an ideal option for those looking for relief of any number of inflammatory diseases.

Only **ARPADOL**[®] provides the optimal combination of full-plant and standardized extract, in a form which will allow it to survive the gastric environment and be fully absorbed.

1. Solumani, R., et. al., The role of stomachal digestion on the pharmacological activity of plant extracts using *Harpagophytum procumbens* as an example, *Can J Physiol Pharmacol*, 1994 Dec; 72 (12): 1532-6).
2. Ahmed, M.I., Afifi, M.I., Younos, I.H., *Harpagophytum procumbens*: A possible natural anti-inflammatory agent, *Clinical Pharmacology Dept., Faculty of Medicine, Minufiya University, Egypt*, 2005.
3. Lahners, M., et al., Anti-Inflammatory and analgesic effects of an aqueous extract of *Harpagophytum procumbens*. *Planta Medica* 1992; 58:117.
4. Chrubasik, S., Conradt, C., Black, A. The quality of clinical trials with *Harpagophytum procumbens*, *Phytomedicine*10, 2003. 613-623.
5. Chrubasik S., Junck, H., Breitschwerdt, H., 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 Anaesth* 1999, 16: 118-129
6. Fiebich, B.L., Heinrich, M., Hiller, K.O., 2001. Inhibition of TNF- α synthesis in LPS-stimulated primary human monocytes by *Harpagophytum* extract SteiHap 69. *Phytomedicine* 8, 28-30.
7. Jang, M.H., Lim, S., Han, S.M., Park, S.J., Shin, I., Kim, J.W., Lee, S.J., Kim, K.A., Kim, C.J.: *Harpagophytum procumbens* suppresses lipopolysaccharide-stimulated expressions of cyclooxygenase-2 and inducible nitric oxide synthase in fibroblast cell line L929. *J Pharmacol Sci* 2003, 93: 367-71.
8. Schulze-Tanzil, G., Hansen, C., Shakibaei, M.: Effect of *Harpagophytum procumbens* DC extract on matrix metalloproteinases in human chondrocytes in vitro. *Arzneimittelforschung* 2004, 54: 2 13-20.
9. Boje, K., Lechtenberg., M., Nahrstedt, A.: New and known iridoid and phenylethanoid glycosides from *Harpagophytum procumbens* and their in vitro inhibition of human leukocyte elastase. *Planta Med* 2003, 69: 820-5
10. Chrubasik, S., Model, A., Pollack, S., Black, A.: A randomized double-blind pilot study comparing Doloteffin and Vioxx in the treatment of low back pain. *Rheumatology* 2003, 42: 141-148.



If you would like to learn more about the activity and benefits of ARPADOL[®], please call Ecotrend 1-800-665-7065 or speak with your Ecotrend Account Sales Manager.