



AMERICAN
BOTANICAL
COUNCIL

P. O. Box 201660
Austin, TX 78720

512/331-8868
FAX 512/331-1924

Mark Blumenthal
Editor

Betsy Levy
Anne Tarleton, PhD
Densie Webb, PhD
Leela Devi, MSN, RN
Summary Writers

Karen Newton
Database Manager

Susan McFarland
Ginger Webb
Co-coordinators

Dawnelle Malone
Research Assistant

The American Botanical Council provides this summary and the enclosed article as an educational service. By providing this article, ABC does not warrant that the data is accurate and correct, nor does distribution of the enclosed article constitute any endorsement of the information contained or of the views of the authors.

ABC does not authorize the copying or use of the original articles. Reproduction of the summaries is allowed on a limited basis for students,

HERBCLIP

**FILE: Saw Palmetto
(*Serona repens*)**

DATE: January 16, 1998

HC 121772

RE: Saw Palmetto Monograph

Snow, Joanne M. Monograph: *Serenoa repens* bartram (Palmae). *The Protocol Journal of Botanical Medicine*, Winter 1996, pp. 15-16.

Serenoa repens, commonly known as saw palmetto or fan palm, is a small horizontal tree or shrub with fan shaped leaves. Native to the coastal regions of the southeastern United States, the plant may be found from South Carolina to Louisiana. Native Americans used saw palmetto berries as both food and medicine. Recent studies have demonstrated the effectiveness of saw palmetto in the treatment of benign prostatic hyperplasia (BPH). This short monograph examines the constituents and pharmacology of saw palmetto berries.

Saw palmetto berries contain nine fatty acids, three steroids, diterpenes, triterpenes, a sesquiterpene, and five alcohols. The berries have shown antiandrogenic, antiexudative, and 5α -reductase inhibitory actions.

The 5α -reductase inhibitory action of saw palmetto berries may account for its usefulness in treating BPH. BPH may be caused by an accumulation of 5α -dihydrotestosterone (5α -DHT) inside the prostate gland, leading to hyperplasia [an increase in the number of cells in the gland]. Testosterone is converted to 5α -DHT by the enzyme 5α -reductase. Inhibition of this enzyme possibly prevents the formation of 5α -DHT and, therefore, its accumulation in the prostate. [Because the ureter passes through the prostate gland, hyperplasia can result in blockages in urinary flow, painful urination (dysuria), and incomplete urination, leading to excessive urination at night (nocturia).]

Because 5α -DHT promotes female hirsutism, the 5α -reductase inhibitory function of saw palmetto berries is an effective treatment in this condition.

In vitro studies have shown extract of saw palmetto berries to exert positive changes in human cellular tissue. Although it acts on testosterone in the prostate, the plant extract does not appear to change systemic hormonal levels.

The author offered minimal information about clinical trials involving saw palmetto berry extract. One double-blind trial with 110 patients demonstrated a significant improvement in symptoms of BPH, including dysuria, nocturia, flow measurement, and residual urine. Another double-blind study did not show a difference between the experimental and placebo group. The article did not give dosages and duration of treatments for either of these studies.

An open study with 305 participants confirmed improvement in symptoms using different instruments and clinical indicators, such as the "international prostate symptom score, quality of life score, urinary flow rates, residual urinary volume, and prostate size." Improvements during the study were reported at 45 days and 90 days.

No serious side effects have been reported in any clinical study, and minor side effects were limited to gastrointestinal problems. Recommended dosage is 320 mg per day of the lipophilic extract, standardized to contain 85-95 percent fatty acids. —*Leela Devi, MSN, RN*

Bin #126