

Saw palmetto

Serenoa repens

Also known as *Serenoa serrulata*, *Sabal serrulata* and the dwarf palm

PREPARATIONS: Extracts of the fruit are used in medicinal preparations. Clinical trials have assessed the effects of lipophilic extracts (containing lipids and sterols) of saw palmetto usually at a dosage of 160mg twice daily for four to 48 weeks.

ACTIVE CONSTITUENTS: Contains fatty acids, sterols, including beta-sitosterol, as well as polysaccharides, flavonoids and other minor constituents. The precise constituents responsible for activity are unclear, although the lipid and sterol constituents appear to be important. Activities demonstrated in preclinical studies include inhibition of 5-alpha reductase activity, antian-drogenic and anti-inflammatory effects.

As with other herbal medicines, the profile of constituents in saw palmetto raw material and preparations will vary qualitatively and quantitatively depending on several factors, including conditions under which the plant material was grown and methods of preparation.

MAIN USES: Most notable contemporary use is for treatment of symptoms of benign prostatic hyperplasia (BPH). Saw palmetto is used by some women for the treatment of acne.

EVIDENCE FOR EFFICACY: A recent Cochrane review, which included 21 randomised placebo-controlled trials lasting between four and six weeks and involving over 5000 participants, concluded that saw palmetto is no more effective than placebo for the treatment of urinary symptoms consistent with benign prostatic hyperplasia. The review updated a previous Cochrane review that had involved mostly poorer quality

Summary Message

There is no robust evidence that saw palmetto fruit extract is effective in the treatment of benign prostatic hyperplasia. Evidence indicates that it is a safe product (at current doses) but with questionable efficacy. As with all herbal medicines, saw palmetto products differ in their pharmaceutical quality, and the implications of this should be considered.

studies and which concluded that saw palmetto fruit extract had benefits over placebo in BPH.

The effects of saw palmetto fruit extract in acne have not been adequately assessed.

ADVERSE EFFECTS: Data from randomised controlled trials and post-marketing surveillance studies indicate that saw palmetto is well tolerated. Typically, adverse events are mild gastrointestinal symptoms.

DRUG INTERACTIONS: There are no established drug interactions for saw palmetto fruit extract, although there is limited evidence from a small number of case reports of increased INR values in patients who had been taking herbal medicines containing saw palmetto fruit extract. The activity of most cytochrome P450 drug metabolizing enzymes appears to be unaffected by saw palmetto fruit extract.

Key references

- Barnes J, Anderson LA, Phillipson JD. Herbal medicines. 3rd edition. London: Pharmaceutical Press. p 521–529.
- Tacklind J, MacDonald R, Rutks I, Wilt TJ. *Serenoa repens* for benign prostatic hyperplasia. Cochrane Database of Systematic Reviews 2009, Issue 2. Art. No: CD001423. DOI: 10.1002/14651858.CD001423.pub2
- Williamson E, Driver S, Baxter K (editors). *Stockley's Herbal Medicines Interactions*. London: Pharmaceutical Press; 2009.

Dr Joanne Barnes

BPharm, PhD, MRPharmS, RegPharmNZ, FLS, Associate Professor in Herbal Medicines, School of Pharmacy, The University of Auckland

Herbal medicines are a popular health care choice, but few have been tested to contemporary standards. **CHARMS & HARMS** summarises the evidence for the potential benefits and possible harms of well-known herbal medicines.