

Figwort

Species (Family)

Scrophularia nodosa L. (Scrophulariaceae)

Synonym(s)

Common Figwort, *Scrophularia*

Part(s) Used

Herb

Pharmacopoeial and Other Monographs

BHP 1983^(G7)

PDR for Herbal Medicines 2nd edition^(G36)

Legal Category (Licensed Products)

Figwort is not included in the GSL.^(G37)

Constituents^(G62,G64)

Amino acids Alanine, isoleucine, leucine, lysine, phenylalanine, threonine, tyrosine and valine.⁽¹⁾

Flavonoids Diosmetin, diosmin and acacetin rhamnoside.⁽²⁾

Iridoids Aucubin, acetylharpagide, harpagide, harpagoside, isoharpagoside, procumbid and catalpol glycoside.⁽³⁻⁵⁾ Figwort is stated to have the same qualitative iridoid composition as devil's claw, but about half the content of harpagoside.

Acids Various acids including caffeic acid, cinnamic acid, ferulic acid, sinapic acid and vanillic acid, present as both esters and glycosides.^(6,7)

Food Use

Figwort is not used in foods.

Herbal Use

Figwort is stated to act as a dermatological agent and a mild diuretic, and to increase myocardial contraction. Traditionally, it has been used for chronic skin disease, and specifically for eczema, psoriasis and pruritus.^(G7,G64)

Dosage

Dried herb 2–8 g by infusion.^(G7)

Liquid extract 2–8 mL (1:1 in 25% alcohol).^(G7)

Tincture 2–4 mL (1:10 in 45% alcohol).^(G7)

Pharmacological Actions

In vitro and animal studies

The iridoid glycosides aucubin and catalpol have been documented to exert a purgative action in mice.⁽⁸⁾ Cardioactive properties and anti-inflammatory activity have been claimed for harpagide and the other iridoid constituents (*see* Devil's Claw).^(G62)

Clinical studies

None documented. The iridoids are stated to be bitter principles.^(G62)

Side-effects, Toxicity

None documented.

Contra-indications, Warnings

Figwort should be avoided in ventricular tachycardia.^(G7)

Pregnancy and lactation The safety of figwort has not been established. In view of the lack of pharmacological and toxicity data, use of figwort during pregnancy and lactation should be avoided.

Pharmaceutical Comment

The chemistry of figwort is well studied and it is stated to be an acceptable substitute for devil's claw (*Harpagophytum procumbens*) with the same qualitative composition of bitter principles but half the content of harpagoside.^(G62) Little scientific evidence was located to justify the herbal uses. In view of the lack of toxicity data and possible cardioactive properties, excessive use of figwort should be avoided.

References

See also General References G7, G31, G36, G37, G62 and G64.

- 1 Toth L *et al.* Amino acids in Scrophulariaceae species. *Bot Kozl* 1977; 64: 43–52.
- 2 Marczal G *et al.* Flavonoids as biologically active agents and their occurrence in the Scrophulariaceae family. *Acta Pharm Hung* 1974; 44(Suppl.): 83–90.
- 3 Swann K, Melville C. Iridoid content of some *Scrophularia* species. *J Pharm Pharmacol* 1972; 24: 170P.
- 4 Swiatek L. Iridoid glycosides in the Scrophulariaceae family. *Acta Pol Pharm* 1973; 30: 203–212.
- 5 Weinges K, Von der Eltz H. Natural products from medicinal plants. XXIII. Iridoid glycosides from *Scrophularia nodosa* L. *Justus Liebigs Ann Chem* 1978; 12: 1968–1973.
- 6 Swiatek L. Phenolic acids of underground parts of *Scrophularia nodosa*. *Pol J Pharmacol Pharm* 1973; 25: 461–464.
- 7 Swiatek L. Pharmacobotanical investigations of some Scrophulariaceae species. *Diss Pharm Pharmacol* 1970; 22: 321–328.
- 8 Inouye H *et al.* Purgative activities of iridoid glucosides. *Planta Med* 1974; 25:285–288.