

# Avens

## Species (Family)

*Geum urbanum* L. (Rosaceae)

## Synonym(s)

Benedict's Herb, Colewort, Geum, Herb Bennet

## Part(s) Used

Herb

## Pharmacopoeial and Other Monographs

BHP 1983<sup>(G7)</sup>

PDR for Herbal Medicines 2nd edition<sup>(G36)</sup>

## Legal Category (Licensed Products)

Avens is not included in the GSL.<sup>(G37)</sup>

## Constituents<sup>(G40,G49,G64)</sup>

Limited information is available on the herb. Constituents reported include bitter principles, resin, tannins and volatile oil.

## Other plant parts

The root has been more extensively studied and is reported to contain a phenolic glycoside (gein), yielding eugenol as the aglycone and vicianose (disaccharide) as the sugar component;<sup>(1)</sup> 30% tannin, including gallic, caffeic and chlorogenic acids (pseudotannins generally associated with condensed tannins);<sup>(1)</sup> a bitter substance, a flavonoid, and volatile oil.

## Food Use

Avens is listed by the Council of Europe as a natural source of food flavouring (category N2). This category indicates that avens can be added to foodstuffs in small quantities, with a possible limitation of an active principle (as yet unspecified) in the final product.<sup>(G16)</sup>

## Herbal Use

Avens is stated to possess antidiarrhoeal, antihaemorrhagic, and febrifugal properties. It has been used for diarrhoea, catarrhal colitis, passive uterine haemorrhage, intermittent fevers, and specifically for ulcerative colitis.<sup>(G7,G64)</sup>

## Dosage

*Dried herb* 1–4 g or by infusion three times daily.<sup>(G7)</sup>

*Liquid extract* 1–4 mL (1:1 in 25% alcohol) three times daily.<sup>(G7)</sup>

## Pharmacological Actions

### *In vitro* and animal studies

A 20% aqueous decoction of avens, administered by intravenous injection, has been reported to produce a reduction in blood pressure in cats.<sup>(2)</sup> Tannins are generally known to possess astringent properties.

## Side-effects, Toxicity

None documented.

## Contra-indications, Warnings

In view of the reported tannin constituents and the lack of toxicity data, it is advisable to avoid excessive use of avens.

*Pregnancy and lactation* Avens is reputed to affect the menstrual cycle.<sup>(G30)</sup> In view of the lack of phytochemical, pharmacological and toxicological data, the use of avens during pregnancy should be avoided.

## Pharmaceutical Comment

Limited phytochemical or pharmacological data are available for avens, although reported tannin constituents would indicate an astringent action thus supporting the traditional use in diarrhoea and haemorrhage. In view of the lack of toxicity data, excessive use should be avoided.

## References

See also General References G2, G7, G16, G30, G31, G36, G37, G40, G49 and G64.

- 1 Psenák M *et al.* Biochemical Study on *Geum urbanum*. *Planta Med* 1970; 19: 154–159.
- 2 Petkov V. Plants and hypotensive, antiatheromatous and coronarodilating action. *Am J Chin Med* 1979; 7: 197–236.