

Liferoot

Species (Family)

Senecio aureus L. (Asteraceae/Compositae)

Synonym(s)

Golden Ragwort, Golden Senecio, Squaw Weed

Part(s) Used

Herb

Pharmacopoeial and Other Monographs

BHP 1983^(G7)

Martindale 32nd edition^(G43)

PDR for Herbal Medicines 2nd edition^(G36)

Legal Category (Licensed Products)

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

Constituents^(G19,G64)

Limited information is documented regarding the constituents of liferoot, although it is well recognised that *Senecio* species contain pyrrolizidine alkaloids.

Pyrrolizidine alkaloids Floridanine, florosenine, otoposine, senecionine.^(1,2)

The volatile oil composition of various *Senecio* species (but not *Senecio aureus*) has been investigated.⁽³⁾

Food Use

Liferoot is not used as a food, although many *Senecio* species are used as a form of spinach in South Africa.

Herbal Use

Liferoot is stated to possess uterine tonic, diuretic and mild expectorant properties. Traditionally, it has been used in the treatment of functional amenorrhoea, menopausal neurosis and leucorrhoea (as a douche).^(G7,G64)

Dosage

Herb 14 g or by infusion three times daily.^(G7)

Liquid extract 14 mL (1:1 in 25% alcohol) three times daily.^(G7)

Pharmacological Actions

No documented studies were located.

Side-effects, Toxicity

Liferoot contains pyrrolizidine alkaloids. The toxicity, primarily hepatic, of this class of compounds is well recognised in both animals and humans^(G19) (see Comfrey).

Contra-indications, Warnings

In view of the hepatotoxic pyrrolizidine alkaloid constituents, liferoot should not be ingested.^(G19)

Pregnancy and lactation In view of the toxic constituents, liferoot is contraindicated during pregnancy and lactation.^(G49) Furthermore, liferoot is traditionally reputed to be an abortifacient, emmenagogue, and uterine tonic.^(G7,G22) In animals, placental transfer and secretion into breast milk⁽⁴⁾ has been documented for unsaturated pyrrolizidine alkaloids.

Pharmaceutical Comment

Little information is documented for liferoot. No pharmacological studies were found to substantiate the traditional uses. The *Senecio* genus is characterised by unsaturated pyrrolizidine alkaloid constituents and the hepatotoxicity of this class of compounds is well recognised (see Comfrey). In view of this, liferoot is not suitable for use as a herbal remedy.

References

See also General References G7, G22, G31, G32, G36, G43, G49 and G64.

- 1 *Pyrrolizidine Alkaloids. Environmental Health Criteria* 80. Geneva: WHO, 1988.
- 2 Roder E *et al.* Pyrrolizidinalkaloide aus *Senecio aureus*. *Planta Med* 1983; 49: 57–59.
- 3 Dooren B *et al.* Composition of essential oils of some *Senecio* species. *Planta Med* 1981; 42: 385–389.
- 4 Mattocks AR. *Chemistry and Toxicology of Pyrrolizidine Alkaloids*. London: Academic Press, 1986: 1–393.