

# Lemon Verbena

## Species (Family)

*Aloysia triphylla* (L'Her.) Britton (Verbenaceae)

## Synonym(s)

*Aloysia citriodora* (Cav.) Ort., *Lippia citriodora* (Ort.) HBK, *Verbena citriodora* Cav., *Verbena triphylla* L'Her.

## Part(s) Used

Flowering top, leaf

## Pharmacopoeial and Other Monographs

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

## Legal Category (Licensed Products)

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

## Constituents<sup>(G22,G34,G57,G64)</sup>

**Flavonoids** Flavones including apigenin, chrysoeriol, cirsimaritin, diosmetin, eupafolin, eupatorin, hispidulin, luteolin and derivatives, pectolarigenin and salvigenin.<sup>(1)</sup>

**Volatile oils** Terpene components include borneol, cineol, citral, citronellal, cymol, eugenol, geraniol, limonene, linalool,  $\beta$ -pinene, nerol, and terpineol (monoterpenes), and  $\alpha$ -caryophyllene,  $\beta$ -caryophyllene, myrcenene, pyrollic acid and isovalerianic acid (sesquiterpenes).<sup>(2)</sup>

## Food Use

In the USA, lemon verbena is listed as GRAS (Generally Recognised As Safe) for human consumption in alcoholic beverages. Lemon verbena is also used in herbal teas.<sup>(G57)</sup>

## Herbal Use

Lemon verbena is reputed to possess antispasmodic, antipyretic, sedative and stomachic properties. It has been used for the treatment of asthma, cold, fever,

flatulence, colic, diarrhoea and indigestion.<sup>(G38,G57,G64)</sup>

## Dosage

**Decoction** 45 mL taken several times daily.<sup>(G34)</sup>

## Pharmacological Actions

None documented.

## Side-effects, Toxicity

None documented for lemon verbena. Terpene-rich volatile oils are generally regarded as irritant and may cause kidney irritation during excretion.

## Contra-indications, Warnings

Individuals with existing renal disease should avoid excessive doses of lemon verbena in view of the possible irritant nature of the volatile oil.

**Pregnancy and lactation** In view of the lack of pharmacological and toxicity data, and the potential irritant nature of the volatile oil, excessive doses of lemon verbena are best avoided during pregnancy and lactation.

## Pharmaceutical Comment

Limited information is available on lemon verbena. The traditional uses are probably attributable to the volatile oil, for which many components have been identified, and to the flavone constituents. In the UK, lemon verbena is mainly used as an ingredient of herbal teas.

## References

See also General References G22, G34, G36, G38, G57 and G64.

- 1 Skaltsa H, Shammas G. Flavonoids from *Lippia citriodora*. *Planta Med* 1988; 54: 465.
- 2 Montes M *et al.* Sur la composition de l'essence d'*Aloysia triphylla* (Cedron). *Planta Med* 1973; 23: 119-124.