

Slippery Elm

Species (Family)

Ulmus fulva Michaux (Ulmaceae)

Synonym(s)

Ulmus rubra Muhl.

Part(s) Used

Bark (inner)

Pharmacopoeial and Other Monographs

BHC 1992^(G6)

BHP 1996^(G9)

Martindale 32nd edition^(G43)

PDR for Herbal Medicines 2nd edition^(G36)

Legal Category (Licensed Products)

GSL^(G37)

Constituents^(G6,G59,G64)

Carbohydrates Mucilage (major constituent) consisting of hexoses, pentoses, methylpentoses, at least two polyuronides, and yielding on hydrolysis galactose, glucose and fructose (trace), galacturonic acid, L-rhamnose and D-galactose.

Other constituents Tannin 3.0–6.5% (type unspecified), phytosterols (β -sitosterol, citrostadienol, dolichol), sesquiterpenes, calcium oxalate and cholesterol.

Food Use

It has been recommended by the FACC (Food Additives and Contaminants Committee) that the use of slippery elm as a flavouring agent in foods should be prohibited.^(G44) Slippery elm is listed by the Council of Europe as a natural source of food

flavouring (category N3). This category indicates that there is insufficient information available to make an adequate assessment of potential toxicity.^(G16)

Herbal Use

Slippery elm is stated to possess demulcent, emollient, nutrient and antitussive properties. Traditionally, it has been used for inflammation or ulceration of the stomach or duodenum, convalescence, colitis, diarrhoea and locally for abscesses, boils and ulcers (as a poultice).^(G6,G7,G8,G64)

Dosage

Powdered bark 4–16 mL (1 : 8 as a decoction) three times daily.^(G6,G7)

Powdered bark 4 g in 500 mL boiling water as a nutritional supplement three times daily.^(G6,G7)

Coarse powdered bark With boiling water as a poultice.^(G6,G7)

Liquid extract 5 mL (1 : 1 in 60% alcohol) three times daily.^(G6,G7)

Pharmacological Actions

Mucilages are known to have demulcent and emollient properties. Mucilage is the principal constituent of slippery elm. Tannins are known to possess astringent properties.

Side-effects, Toxicity

None documented. In view of the known constituents of slippery elm it would appear to be non-toxic.

Contra-indications, Warnings

Whole bark has been used to procure abortions.

Pregnancy and lactation There are no known problems with the use of powdered slippery elm during pregnancy.

Pharmaceutical Comment

The primary constituent in slippery elm is mucilage, thereby justifying the herbal use of the remedy as a demulcent, emollient and antitussive. There are no known problems regarding toxicity

of slippery elm, although its use as a food flavouring agent has not been recommended. The supply of whole bark is controlled by regulations.⁽¹⁾

References

See also General References G5, G6, G9, G11, G22, G31, G36, G37, G43, G59 and G64.

- 1 The Medicines (Retail Sale or Supply of Herbal Medicines) Order 1977, SI 1977: 2130.