Queen's Delight

Species (Family)

Stillingia sylvatica L. (Euphorbiaceae)

Synonym(s)

Queen's Root, Stillingia, Stillingia treculeana (Muell. Arg.) Johnst., Yaw Root

Part(s) Used

Root

Pharmacopoeial and Other Monographs

BHP 1996^(G9) PDR for Herbal Medicines 2nd edition^(G36)

Legal Category (Licensed Products)

GSL(G37)

Constituents(G41,G48,G64)

Terpenoids Eight compounds, termed stillingia factors S₁-S₈, have been isolated and identified as daphnane-type and tigliane-type esters carrying saturated, polyunsaturated or hydroxylated fatty acids. (1)

Other constituents Volatile oil 3-4%, fixed oil, acrid resin (sylvacrol), resinic acid, stillingine (a glycoside) and tannin.

Other plant parts Hydrocyanic acid (leaf and stem). (1)

Food Use

Queen's delight is not used in foods.

Herbal Use

Queen's delight is stated to possess sialogogue, expectorant, diaphoretic, dermatological, astringent, antispasmodic and, in large doses, cathartic properties. Traditionally, it has been used for bron-

chitis, laryngitis, laryngismus stridulus, cutaneous eruptions, haemorrhoids, constipation and specifically for exudative skin eruption with irritation and lymphatic involvement, and laryngismus stridulus. (G7,G64)

Dosage

Dried root 1-2 g or by decoction three times daily. (G7)

Liquid extract 0.5-2.0 mL (1:1 in 25% alcohol) three times daily. (G7)

Tincture 1-4 mL (1:5 in 45% alcohol) three times daily. $^{(G7)}$

Pharmacological Actions

None documented.

Side-effects, Toxicity

Overdose of queen's delight is reported to cause vertigo, burning sensation of the mouth, throat and gastrointestinal tract, diarrhoea, nausea and vomiting, dysuria, aches and pains, pruritus and skin eruptions, cough, depression, fatigue and perspiration. (G22) The diterpene esters are toxic irritant principles known to cause swelling and inflammation of the skin and mucous membranes. (1,G33)

The leaves and stem are documented to be toxic to sheep because of the hydrocyanic acid content. (2)

Contra-indications, Warnings

In view of the irritant nature of the diterpene esters, queen's delight may cause irritation to the mucous membranes. It is stated that queen's delight should be used with care, and never taken in large doses. (G49) It is recommended that the root should not be used after two years of storage. (G49)

Pregnancy and lactation In view of the irritant and potentially toxic constituents, the use of queen's

delight during pregnancy and lactation should be avoided.

Pharmaceutical Comment

The Euphorbiaceae plant family is characterised by the diterpene esters. These compounds, known as phorbol, ingenane or daphnane esters depending on their skeleton type, have been investigated as constituents of genera such as *Euphorbia* and *Croton*, and some of them have been found to be cocarcinogenic and highly irritant to mucous membranes. (G33) No scientific evidence was found to

justify the reputed herbal uses. In view of this and the potential toxicity of queen's delight excessive use is not recommended.

References

See also General References G9, G10, G22, G33, G36, G37, G41, G48, G49 and G64.

- 1 Adolf W, Hecker E. New irritant diterpene-esters from roots of *Stillingia sylvatica* L. (Euphorbiaceae). *Tetrahedron Lett* 1980: 21: 2887–2890.
- 2 Lewis WH, Elvin-Lewis MPF. Medical Botany. New York: Wiley Interscience, 1977.