

Lacebark, Ribbonwood *Hoheria populnea* (A.Cunn)



Family Malvaceae

Maori names houhere, houti, houtii, ongaonga, puruhi

Description

Genus Hoheria is endemic to NZ and there are between five and eight species¹. *Hoheria populnea* is a semi deciduous, small tree with greyish –brown bark. Leaf: Thin leaves 5-12cm long by 6cm wide. Colour of leaf is dark green above and often purplish beneath, with coarse teethed margins. Alternate leaves. Flower: White, attractive flowers up to 3cm wide, produced singly or in clusters of five to ten flowers in late summer through to autumn. Fruit::Five winged compressed seeds are found inside dry fruit 7cm wide. Seeds are wind dispersed and germinate readily. Habitat coastal and lowland forests. A common tree from North Cape to Waikato and the Bay of Plenty especially along river banks and forest edges. Cultivation: Germinates easily from seed, can dominate forest floor with seedlings.

Harvesting and Storage

Fresh leaves. Bark – branch removed from tree

Uses

Primary Use: Medicinal Leaves, inner and outer bark

Other Uses: The lace like inner bark is used for fine decorative weaving-kete, headbands, or as a trim on hats and cloaks. The washable inner fibre was used as a sanitary towel by Maori women. Also used in embroidery.

Traditional: **Food** Best (1902) says that in times of scarcity the inner bark was eaten by members of the Tuhoe tribe.

Medicinal

Most of the medicinal uses to which Hoheria was applied in the early days, relate largely to its content of mucilaginous polysaccharides, and there are many similarities between applications of Hoheria and those of other phytomedicines rich in polysaccharide hydrocolloids. These include Slippery Elm bark (*Ulmus fulva*) and Marshmallow root (*Althaea officinalis*), plants which have a strong tradition of use especially for inflammatory conditions of the digestive and respiratory systems.. While polysaccharide mucilaginous components are poorly bioavailable following oral administration, they are thought to form a protective layer on the mucosa of the gastrointestinal tract, as well as

¹ *H.angustifolia* found in forest margins from New Plymouth southwards. *H.glabrate* found western side Southern Alps. *H.sexstylosa* forest margins from Whangarei to Nelson.

produce a reflex expectorant effect on the lungs. Fevers - a drink made from the bark was also used to treat fevers, and to 'cause perspiration when poisoned by the katipo, karaka or tutu'. Inner bark composed of lace-like fibres used for bandages by Maori and European Bark was cut into strips, soaked in cold water for two days until a jelly formed. This was then used by old people to bathe weak and sore eyes. Inner bark of Hoheria was mixed with finely cut butts of Phorium (flax) leaves and liquid was applied to burns. Like many mucilaginous phytomedicines including Slippery Elm, a wide range of possible topical applications exist. Hoheria bark was bruised into a pulp and applied as a poultice for boils, bruises, wounds, abscesses, ulcers and burns

Respiratory conditions – as an expectorant and anti-inflammatory, including: non-productive coughs and colds. Bronchitis and asthma Inflammatory conditions of the gastrointestinal tract – as a demulcent and gastroprotective agent, including: • Dyspepsia, gastritis and reflux oesophagitis. • Peptic ulcer, diverticular disease, ulcerative colitis, Crohn's disease. • Enteritis and irritable bowel syndrome. Other therapeutic uses: • Constipation – as a bulk laxative, providing large doses are taken • Obesity – like other soluble fibres, Hoheria may assist as a possible weight loss agent if taken in sufficient doses, as part of an overall programme. • Hypercholesterolemia - various mucilages and other soluble fibres have exhibited efficacy in the treatment of high blood cholesterol levels, largely by impairing cholesterol absorption from the gut(It is therefore conceivable that large doses of Hoheria may show mild hypocholesterolaemic activity. • Painful conditions of the urinary tract - while no evidence exists to support such indications for Hoheria, mucilaginous plants are reputed to help in the treatment of kidney stones, cystitis and urethritis, possibly through a reflex-mediated demulcent action.

Constituents

Polysaccharide hydrocolloids (mucilage) – appear to be made up largely of D-xylose and D-glucuronic acid units.

Side effects

No adverse effects, contraindications or herb-drug interactions have been reported to date. The indications are based partly on knowledge of historical uses, (some of which appear to have dated from colonial times, following the introduction of Slippery Elm as a medicine in New Zealand), as well as extrapolation from the known uses of comparable mucilaginous plants.

References

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