

## Re-Discovering Plantain **Plantain**Plantago major (LINN.)

Family: N.O. Plantaginaceae



**Synonyms** - broad-leaved plantain, common plantain, white man's foot, snakeweed, ripple grass, waybread, slan-lus, waybroad, cuckoo's bread, englishman's foot, buckhorn plantain, dog's ribs, hock cockle, rub grass, dooryard plantain, round-leaved plantain, weybroed (Anglo-Saxon), Che Qian Zi (China), Breitwegerich (German), Tanchagem-maior (Portuguese), Llantén común (Spanish), Llantén major (Spanish)

Parts Used - Root, leaves, flower-spikes.

**Description** – No, it's not a green banana – but a common weed that you walk over every day on your front lawn. Plantain is a low dwelling perennial plant with oval, ribbed short-stemmed green leaves and can be found almost everywhere in New Zealand as in most of the world though is thought to be indigenous to Eurasia <sup>1</sup>. Plantain spreads by seeds does not seam fussy where it grows. It thrives in sun or shade, and in almost any soil condition. The leaves form basal rosettes the leaves may grow up to about 6" long and 4" wide depending on their soil and light conditions. Plantain sends up a leafless flower stock in summer - autumn when the stalks can be up to ten inches tall.

Plantago lanceolata is also commonly found in New Zealand. To compare, Plantago major has wide rounded leaves, with a flowering spike covered with small seeds whereas Plantago lanceolata has longer, slender pointed ribbed leaves and a flowering stem, with a mostly bald head except for a light ring of tiny flowers on the top (you may remember playing soldiers with them as children). They both have the same medicinal uses.

**History** - Plantain was brought to New Zealand by the Early Settlers and was quickly nicknamed English Mans Foot (or Whiteman's Foot) because it seemed to grow wherever the settlers went. Early Christians considered plantain a symbol for the well-trodden path of the multitude that followed Christ <sup>2</sup>. Nowadays this prolific weed that is taken for granted by most New Zealanders, and even considered a pest by many, is one of the most notarized herbs in history dating as far back as Alexander the Great (356 B.C.-323 B.C.) who used plantain to cure his headaches and Pedanius Dioscorides (40 BC-90BC), who studied medicine in Egypt and was a physician in the Roman Army used plantain for its soothing, cooling, healing and softening properties. The Anglo-Saxons (450 A.D. to 1066 A.D.) listed plantain as one of their 9 sacred herbs. Desiderius Erasmus (1466 -1536) a classical scholar, stated that plantain was an antidote for the toxins of poisonous spiders. King Henry the VIII (1491-1547) was an amateur in medicine. The British Museum has his collection of 114 favorite recipes, written in his own hand. He used plantain as one of his basic herbs. William Shakespeare (1564-1616) spoke of plantain in his plays "Love's Labour's Lost" (iii,i), "Two Noble Kinsmen" (I,ii) and "Romeo and Juliet". From Romeo and Juliet: "Radish, Raphanus sativus Romeo. Your Plantain leaf is excellent for that, Benvolio. For what, I pray thee, Romeo? For your broken skin."

More recently the German Commission E. (Germanys version of the "FDA") have scientifically tested Plantain with good result; proving that it is effective for wound healing and as a treatment for lung conditions, including bronchitis, asthma, coughs, mucous membrane irritations, upper respiratory infections. Research has also shown that it is valuable used topically for skin problems. <sup>4</sup>

Studies have also shown that plantain can stop diarrhea in children. <sup>5</sup>

**Active Compounds and Medicinal Uses** - Dr John R. Christopher a pioneer in herbal medicine writes - The plantain fruit stimulates gastric mucus secretion and growth of the gastric mucosal cells. Plantain's flavonoids can increase the thickness of this layer. The lectins in plantain seem to bind some mannose oligosaccharides that are on some bacteria which help them attach to the gastric and intestinal linings.<sup>6</sup>

The tannins (astringent), allantoin (promotes wound healing, speeds up cell regrowth/healing and softens skin), apigenin (anti-inflammatory flavonoid), aucubin (a glycoside, a powerful anti-toxin, increases uric acid excretioin by the kidneys), baicalein, linoleic acid, oleanolic acid, sorbitol and iridoid glycosides in plantain are considered the major factors in making it a mild anti-inflammatory, as well as an antimicrobial, antihemorrhagic and an expectorant. Aucubin is another glycoside in plantain. It acts as a sedative, anaesthetic, alterative, antiseptic,

anti-viral, anti-toxic ,anti-histamin, anti-inflammatory, anti-rheumatic, anti-tumor, anti-cancer, anti-carcinogenic, a diuretic an expectorant, a hypotensive and an organoleptic. This glycoside has been studied numerous times.

Plantain contains high levels of beta carotene (A). It also has ascorbic acid (vitamin C) and vitamin K. Plantain also contains silica which makes plantain high in calcium. This herb is high in mucilage especially the seeds.8

Also active in plantains are monoterpene alkaloids, triterpenes, phenois, sugars and the flavonoids lutelin, scutellarin, baicalein, nepetin, hispidulin, plantagoside, and acteoside plantamajoside. Plantain also contains other plant acids such as chlorogenic, citric, ferulic, neochlorogenic, fumaric, hydroxycinnamic, salicylic, ursolic, and benzoic acids. Catalpol stimulates the production of adrenal cortical hormones. This increased the production of adrenal gland androgens, has an anti-inflammatory ability, seems to help in wound healing and increases the production of sex hormones.9

Simple Home Remedies - Known as Snakeweed because of its abilities to draw poison from a wound. Plantain is so helpful when suffering from a bee sting, insect bite, stinging nettle sting or even a splinter. Just pick a fresh leaf chew it up and hey presto you have a "spit poultice". Apply fresh spit poultices (with a sticky plaster if you have one) to the affected area as required every few hours, and problem solved!!

Most Herbalists admire Plantain as an effective cellular regenerator, which makes it incredibly good at healing wounds. Plantain poultices, tinctures, creams and oils are essential for families and animals. It is wise to make sure you have plenty of homemade plantain cream or infused oil or tincture at the ready for any necessary situation. Having said that a fresh source of plantain is never far away!!

An infused oil of plantain is easy peasy to make and a great basic to have on hand. Choose a dry, sunny day and harvest the plantain in the afternoon (once the dew has dried). Wipe the leaves clean of any moisture and debris with a tissue then pack tightly into a dry clean jar. Cover with olive oil (first pressed, cold pressed is best) to the top. Make sure the jar is out of direct sunlight and let it sit at room temperature for six weeks. Every day for the first week, top up the oil so that it completely covers the leaves. After six weeks, strain out the plant material. You now have your own beautiful emerald green, medicinal plantain oil! Once you have made a good infused oil it can easily be added to creams and salves.

You can also blend plantain into your breakfast smoothies; its bitter action is great for digestion, detoxing and liver cleansing. Yum Yum!!

Plantain is not only fantastic for people problems, but is also a valuable Animal Remedy. Drizzle the oil onto cuts, wounds, rashes, stings and other skin conditions. The Plantain will draw out any contaminants before effectively healing the damaged tissue. Try blending the Plantain with a few drops of Tea Tree Oil or Grapefruit seed extract for their added antifungal properties; this mix is excellent for treating the many fungal complaints suffered by horses.

As always be sure you correctly identify your herb and be careful not to harvest from areas that may be contaminated by sprays or pollutants.

This is just a brief overview to wonders of Plantain. Just a taste to stimulate your curiosity there is so much information available on this incredible herb.

Plantain is the third most common weed in New Zealand, which is great for us, as it is a very effective healer, it is everywhere and it is free!

Bibliography

The Complete German Commission E Monographs, by Mark Blumenthal – 1998 <sup>4</sup> www.botanical.com www.prairielandherbs.com 1,

www.herballegacy.com

This information sheet, Re-Discovering Plantain, has been researched by Carolyn Press-McKenzie of the Herb Federation of New Zealand for Herb Awareness Week 2010